Ancient Cities of the Indus Civilization

Vol: 04

Ruk Sindhi

Ancient Cities of the Indus Civilization

Volume: 04

Ruk Sindhi

Karachi

Contents

Preface

Ancient Cities of the Indus Civilization

1.	Rakhi Garhi	Haryana
2.	Rajo Dero	Sindh
3.	Rana Ghundai	Balochistan
4.	Rangpur	Gujarat
5.	Rehman Dheri	KPK
6.	Rohel jo Kandh	Sindh
7.	Rojdi	Gujarat
8.	Rupnagar	Punjab (India)
9.	Sanyasi Buthi	Sindh
10.	Sinauli	Uttar Pradesh
11.	Shah Jo Kotro	Sindh
12.	Sari Khola	KPK
13.	Sheri Khan Tarakai	KPK
14.	Shikarpur	Gujarat

15. Shortughai Afghanistan
16. Siswal Haryana
17. Sokhta Koh Balochistan
18. Sothi Rajasthan
19. Surkotada Gujarat
20. Sutkagan Dor Balochistan
21. Tharri Gajo Sindh
22. Thir Sindh
23. Tando Rahim Sindh
24. Taoong je Bathi Sindh
25. Tharo Tikri Sindh
26. Thirhi Bahadur Shah Balochistan
27. Tigrana Haryana
28. Usman Ji Bathi Sindh
29. Vejalka Gujarat

Preface

The Indus Valley Civilization is one of the oldest, most advanced, and best-organized civilizations in the world. It established enduring examples of urban planning, trade, industry, agriculture, culture, and intellectual development in human history. The cities of this civilization occupy a unique place in world history because of their sophisticated engineering, organized social structure, and extensive international trade networks.

In my book, **"Ancient Cities of the Indus Civilization,"** I present a detailed study of the archaeological sites and urban centers associated with the Indus Civilization. These sites are located not only in Sindh and other regions of Pakistan but also extend across India and Afghanistan. According to modern archaeological research, more than two thousand Indus Civilization sites have been discovered in Pakistan, India, and Afghanistan.

While many important cities and settlements have been brought to light through excavation, a large number of sites still await comprehensive scientific investigation and archaeological exploration.

This book provides detailed and carefully compiled information on more than 136 ancient cities, villages, and settlements. The work consists of four volumes, each comprising approximately three hundred pages. Collectively, these volumes cover more than 136 archaeological sites associated with the Indus Civilization. Each volume systematically examines the historical background, archaeological remains, cultural connections, economic activities, and various aspects of urban life related to these ancient centers.

This book is not merely the outcome of academic research; it is also a serious effort to reintroduce the greatness of the Indus Civilization within a global context. Special attention has been given to urban planning, river systems, trade routes, cultural continuity, and interregional connections. Through this approach, readers will gain a deeper

understanding of the historical significance of the Indus Civilization and its fundamental contribution to the development of human civilization.

"Ancient Cities of the Indus Civilization" is an important scholarly resource for researchers, students, teachers, historians, and general readers alike. It is hoped that this work will encourage new directions in the study of the ancient history and cultural heritage of Sindh and the broader South Asian region, while also strengthening global awareness of the Indus Civilization.

This remarkable heritage of the Indus Civilization is not merely a legacy of the past; it is a luminous chapter in the intellectual, social, and cultural journey of humanity. Its scientific study, preservation, and promotion remain a collective responsibility for all of us.

Ruk Sindhi

Karachi, June 2026

Chapter One

Ancient Cities of the Indus Civilization

The Indus Civilization is one of the world's oldest and most prosperous human civilizations. Compared with its contemporary civilizations of Egypt and Mesopotamia, it left a deeper impact across a much wider geographical region. Modern archaeological excavations and scientific research have

demonstrated that this civilization was not confined to a single limited area; rather, it represented a highly organized, peaceful, and advanced society whose foundations were laid approximately 9,500 years ago.

1. Geographic Extent and Present-Day Boundaries

When viewed through the lens of modern political and geographical boundaries, the archaeological sites of the Indus Civilization are found throughout all provinces of present-day Pakistan (Sindh, Balochistan, Punjab, and Khyber Pakhtunkhwa), as well as in parts of Afghanistan (such as Shortugai) and various states of India, including Gujarat, Rajasthan, Haryana, and Punjab.

Approximately 9,500 years ago, these regions collectively fell within the social, economic, and political sphere of influence of the people who developed and sustained the Indus Civilization. Archaeological surveys and excavations conducted to date have identified nearly 2,000 sites associated with this civilization. While some of these sites

have undergone systematic scientific excavation, many others remain as unexplored mounds and ruins, still awaiting the revelation of the historical secrets concealed within them.

2. Chronology of the Indus Civilization

The Indus Civilization evolved through several developmental stages, progressing from an early village-based culture to a highly sophisticated urban civilization. Archaeological evidence suggests that many of its settlements remained occupied from approximately 7500 BCE until around 1500 BCE. For a clearer understanding of its historical development, the civilization may be divided into three major phases:

A. The Earliest Period: The Beginning of Rural Development

The oldest foundations of this civilization date back to around 7500 BCE.

- **Lakhan-jo-Daro:** Considered one of the earliest proto-urban and industrial developmental sites

within the broader Indus cultural sphere.

- **Mehrgarh:** A site where human communities first abandoned a purely hunting-based lifestyle and began building permanent settlements, domesticating animals, and practicing agriculture through the cultivation of crops and vegetables.
- **Kili Gul Muhammad (c. 4200 BCE):** This site reflects further cultural development during the early period, providing evidence for some of the earliest forms of pottery production.

B. Early Phase: The Rural Cultural Tradition (Early Harappan Phase)

This period extends roughly from 3500 BCE to 2300 BCE. During this era, communities learned to establish permanent villages and develop distinctive local cultural traditions. Important settlements of this phase include:

- **Amri (Dadu, Sindh):** Famous for its distinctive painted pottery and for illustrating the cultural

evolution that preceded the urban phase.

- **Kot Diji (Khairpur, Sindh):** Known for its fortification walls and early use of baked bricks, features that later became fundamental elements of Indus urbanism.

C. The Zenith of Urban Civilization (Mature Harappan Phase)

This represents the most advanced and flourishing stage of the Indus Civilization. During this period, architecture, urban planning, drainage systems, and trade reached remarkable levels of sophistication. Major urban centers of this phase include:

- **Mohenjo-daro (Larkana, Sindh):** Renowned worldwide for its Great Bath, well-planned streets, and highly developed civic administration.
- **Harappa (Punjab):** Another major political and commercial center of the civilization, where numerous seals, tools, and other artifacts have been discovered.
- **Chanhu-daro (Shaheed Benazirabad/Nawabshah,**

Sindh): A specialized industrial center known for the manufacture of carnelian beads, cosmetic items, and various craft products.

3. Foundations of Modern Scientific Research

In the second edition of this book, detailed research articles are presented on several of the most significant and foundational settlements of the Indus Civilization.

The study of these ancient sites is not based on legends or speculative narratives; rather, it relies upon evidence obtained through modern scientific methods, including radiocarbon dating, satellite mapping, archaeobotany, and other archaeological techniques. This book aims to guide readers through the remarkable heritage of the past—a heritage that remains a source of pride for Sindh and the wider region today.

Rakhi Garhi

Introduction

Rakhigarhi (Rakhi Garhi) is one of the most important and extensive archaeological sites of the Indus Valley Civilization (Harappan Civilization), located in the Hisar district of Haryana, India. Due to its vast size, urban organization, cultural continuity, and evidence of human habitation, the site occupies a position of exceptional importance in archaeological scholarship. According to modern research, Rakhi Garhi is considered one of the largest urban settlements of the Indus Valley Civilization and, according

to several scholars, may even surpass both Mohenjo-daro and Harappa in terms of area.

The Indus Valley Civilization, recognized as one of the world’s earliest urban civilizations, flourished approximately between 3300 BCE and 1300 BCE, while its Mature Harappan Phase extended roughly from 2600 BCE to 1900 BCE. Rakhi Garhi was among the major urban centres of this civilization, where evidence of urban planning, industry, trade, agricultural economy, and social organization has been uncovered. Consequently, the study of this site is significant not only for understanding Harappan society but also for broader discussions concerning the ancient history, population development, and cultural continuity of South Asia.

Geographical Location and Environmental Background

Rakhi Garhi is situated near the village of the same name in the Hisar district of Haryana state. The site extends over approximately 350 hectares or more and comprises several archaeological mounds. Scholars identify at least seven

major mounds, while some archaeological surveys suggest an even greater number. Collectively, these mounds indicate the existence of a large urban settlement consisting of residential, industrial, administrative, and burial zones.

Geographically, Rakhi Garhi lies within the region associated with the ancient Ghaggar-Hakra river system, which some researchers have linked with the ancient Sarasvati River. The fertile plains and former river channels of this region provided favourable conditions for agriculture and human settlement. During the Holocene period, the climate remained relatively supportive, enabling the gradual transformation of early farming communities into complex urban centres.

Between 2600 BCE and 1900 BCE, during the peak of the Harappan Civilization, the surrounding natural and hydrological resources played an essential role in sustaining Rakhi Garhi’s urban economy. However, in later centuries, climatic fluctuations, declining rainfall, and changes in river systems negatively affected the region,

factors that many scholars associate with the decline of urbanism in the Indus Valley Civilization.

Discovery and Early Excavations

The scientific recognition of Rakhi Garhi emerged during the second half of the twentieth century. In the 1960s, archaeologist Suraj Bhan identified the site as belonging to the Harappan cultural tradition during archaeological surveys in the region. Based on surface findings such as pottery fragments, bricks, tools, and other cultural remains, he suggested that the site represented an important ancient urban centre.

Later, from 1997 to 2000, systematic excavations were conducted by the Archaeological Survey of India (ASI) under the supervision of Amarendra Nath. These excavations revealed residential structures, streets, drainage systems, cemeteries, workshops, ornaments, beads, pottery, and numerous other archaeological materials. The discoveries clearly demonstrated that Rakhi Garhi was not merely a village or a minor settlement,

but rather a sophisticated and highly organized urban centre.

In recent years, renewed phases of excavation have yielded additional findings, further reinforcing the site’s historical importance. In particular, discoveries of human skeletal remains and advances in genetic research (DNA studies) have drawn considerable international scholarly attention to Rakhi Garhi.

Historical Importance of Rakhi Garhi

Rakhi Garhi occupies a central place in the study of the Indus Valley Civilization because it provides valuable evidence concerning the evolution, urbanization, and social organization of Harappan society. Archaeological remains from the site indicate the presence of planned streets, residential houses, water management systems, drainage facilities, and industrial activities.

One of the site’s greatest strengths lies in the fact that it preserves evidence from the Early Harappan, Mature Harappan, and Late Harappan phases, thereby enabling scholars to trace the

cultural continuity and transformation of the civilization across different periods. In other words, Rakhi Garhi represents a rare archaeological landscape where multiple developmental stages of Harappan civilization coexist in a single location.

Moreover, modern genetic studies of human remains recovered from the site have opened new debates regarding ancient populations of South Asia, making Rakhi Garhi important not only in archaeology but also in genetics, social history, and cultural studies.

Urban Planning and Settlement Structure

Rakhi Garhi was one of the major urban centres of the Indus Valley Civilization, where highly organized urban planning has been clearly evidenced through archaeological excavations. The site consisted of multiple mounds forming a systematically organized settlement, where residential, industrial, administrative, and burial zones were spatially arranged. The vast scale and layout of the settlement suggest that it supported a substantial population

engaged in diverse social and economic activities.

Excavations have revealed that roads and streets at Rakhi Garhi were constructed according to a deliberate plan. Several pathways running in north–south and east–west directions have been identified. Although a perfectly symmetrical grid pattern, similar to that of Mohenjo-daro, is not evident throughout the site, there is nonetheless substantial evidence of systematic urban organization. Alongside these streets, drainage channels were discovered, serving the purposes of sanitation and wastewater disposal.

The urban layout further indicates a conscious effort to separate habitation areas, industrial activities, and public spaces into distinct sectors. Such planning reflects a sophisticated level of civic administration and urban governance within Harappan society.

Architectural Structures and Construction Techniques

Architectural remains from Rakhi Garhi demonstrate the use of both mud bricks and baked bricks in construction. Standardized brick proportions employed in houses, walls, wells, and drainage systems indicate an advanced understanding of engineering and construction techniques within the Harappan world.

Excavations uncovered several rectangular residential houses, generally aligned parallel to streets. These houses typically contained multiple rooms, courtyards, hearths, and spaces intended for daily domestic activities, suggesting an organized pattern of family life. In some areas, larger platforms, verandas, and communal structures were also identified, which may have served administrative, social, or ritual purposes.

The presence of wells highlights the importance of a stable water supply in the settlement. Numerous brick-lined wells, drainage systems, and water-management facilities attest to the high level of urban sophistication achieved at Rakhi Garhi. Drainage channels were often built along streets and covered

with baked bricks, reflecting an advanced concern for sanitation. Such civic planning is considered among the earliest examples of organized urban infrastructure in human history.

Industry and Craft Production

Archaeological discoveries indicate that Rakhi Garhi functioned as an important centre of industry and craftsmanship. In particular, workshops related to bead-making have been excavated, where ornaments were produced using semi-precious stones such as agate, carnelian, and jasper.

Evidence recovered from these workshops includes kilns, unfinished materials, and polishing tools used in bead production. These findings establish Rakhi Garhi as a significant industrial centre of the Harappan Civilization. In addition to bead production, pottery-making, metallurgy, bone-tool manufacturing, and shell ornament industries also flourished at the site.

Clay toys, animal figurines, pottery vessels, copper tools, needles, hooks,

and various utilitarian implements recovered from excavations demonstrate the technical expertise and artistic abilities of the inhabitants.

Trade and Economic Activities

The economy of Rakhi Garhi was fundamentally based on an agro-pastoral system, though trade also played an essential role. Archaeological evidence suggests that the inhabitants cultivated crops such as wheat, barley, and other cereals, while cattle, sheep, goats, and buffaloes formed an important part of animal husbandry.

Faunal remains and botanical evidence indicate that agriculture and livestock management collectively sustained the local economy and food supply. Certain studies further suggest that dairy products constituted an important element of daily subsistence.

Commercially, Rakhi Garhi maintained extensive interactions with other Harappan centres. The discovery of semi-precious stones, shells, lapis lazuli, and other non-local materials demonstrates the existence of long-

distance trade networks. Marine shells appear to have been imported from coastal regions, while valuable stones originated from areas such as Afghanistan, Gujarat, and Rajasthan.

These findings confirm that Rakhi Garhi was not merely an agricultural settlement, but an active participant in the wider Harappan trade system, where production, industry, and commerce were closely interconnected.

Material Culture and Everyday Life

The material culture uncovered at Rakhi Garhi provides significant insights into the daily lives of its inhabitants. Red pottery decorated with black painted motifs reflects Harappan artistic traditions and aesthetic sensibilities. Likewise, copper tools, stone implements, seals, beads, and ornaments served not only practical purposes but also reflected social identity and commercial interactions.

Bangles, necklaces, beads, and copper mirrors recovered from female burials suggest that personal adornment and bodily decoration held considerable

importance in social life. Meanwhile, toys and animal figurines imply the existence of leisure practices and symbolic or cultural expressions.

Taken together, the material remains indicate that the inhabitants of Rakhi Garhi belonged to a socially, economically, and technologically advanced urban society, in which craftsmanship, trade, and civic organization occupied a central position.

Social Life and Everyday Practices

Archaeological evidence from Rakhi Garhi suggests that its inhabitants lived within a socially organized and highly structured urban environment. The arrangement of residential houses, specialized craft workshops, systematically planned streets, and drainage systems indicates the presence of an organized civic framework regulating daily life.

The architectural layout of houses suggests that family-based domestic life occupied an important position in society. Many houses consisted of courtyards, multiple rooms, hearths, and

domestic activity areas, reflecting organized household arrangements. Personal ornaments such as bangles, necklaces, beads, copper jewelry, and decorative items found in excavations demonstrate that bodily adornment and aesthetic expression held social significance.

Terracotta toys, miniature wheeled carts, and figurines of birds and animals further indicate the presence of leisure activities, symbolic representation, and possibly cultural or ritual practices within everyday life.

Religious Tendencies and Symbolic Culture

Although no monumental temples or centrally organized religious institutions have been discovered at Rakhi Garhi, archaeological evidence suggests the existence of ritualistic and symbolic practices. Excavations have revealed fire altars in some areas, containing burnt bones, charcoal, and pottery remains. Some scholars interpret these structures as locations used for ritual ceremonies, sacrificial offerings, or communal gatherings.

Animal figurines, particularly representations of bulls or humped cattle, appear to have held symbolic importance within Harappan cultural life. Likewise, seals depicting animals, including the well-known unicorn motif, may have served administrative, commercial, or symbolic purposes.

However, there is insufficient evidence to confirm the existence of a centralized religious authority or priestly institution at Rakhi Garhi. Consequently, many researchers argue that religious life in Harappan society may have been primarily domestic or community-based rather than institutionalized.

Burial Customs and Cemeteries

One of the most significant discoveries at Rakhi Garhi is its cemetery, where numerous human skeletal remains have been excavated. The burial ground was located separately from the principal urban settlement, consistent with broader Harappan mortuary traditions.

Most burials consisted of simple pit graves in which the deceased were carefully interred. The positioning of

bodies, orientation of graves, and associated grave goods suggest the existence of established funerary customs. Pottery vessels, beads, bangles, and ornaments found in many graves may have been placed with the deceased for symbolic or ritual purposes.

Some evidence of joint burials has also been identified, where two individuals were buried together in a single grave. Unlike the elaborate royal tombs of Egypt or Mesopotamia, however, Rakhi Garhi provides little evidence of extravagant burials or highly differentiated elite graves. This observation has encouraged scholars to suggest that Harappan society may have been relatively less stratified in comparison with certain contemporary civilizations.

Genetic Research on Human Remains

Rakhi Garhi gained international scholarly attention following the genetic analysis of human skeletal remains recovered from the site. DNA extracted from the remains of a female individual

revealed evidence of indigenous South Asian ancestry combined with ancestry related to ancient Iranian-related populations.

A particularly significant finding was the absence of genetic components associated with Steppe pastoralist populations, which appear in South Asia during later historical periods. As a result, research at Rakhi Garhi has become central to academic debates regarding ancient population movements, Indo-European linguistic dispersals, and the biological history of South Asia.

Nevertheless, scholars emphasize caution in drawing broad historical conclusions from a limited number of samples, and further genetic investigations remain necessary to provide a fuller understanding of Harappan populations.

The Decline of Rakhi Garhi

Like other urban centres of the Indus Valley Civilization, Rakhi Garhi gradually experienced decline over time. Many scholars argue that climatic instability,

declining rainfall, alterations in river systems, and agricultural stress after approximately 1900 BCE negatively affected urban life. The weakening of the Ghaggar-Hakra river system likely disrupted agricultural productivity and commercial exchange, reducing the settlement’s regional significance.

Some researchers additionally point to internal economic and social transformations as contributing factors. However, the majority of archaeological evidence does not support the theory of sudden destruction through warfare or catastrophic invasion. Rather, Rakhi Garhi appears to have undergone a gradual process of urban decline and social transformation.

Conclusion

Rakhi Garhi represents one of the most important and extensive urban centres of the Indus Valley Civilization. Its sophisticated urban planning, architectural achievements, industrial specialization, trade networks, and social organization collectively demonstrate the advanced nature of Harappan civilization.

The site offers invaluable insights into early urban life, technological innovation, population history, and cultural continuity in ancient South Asia. Excavations at Rakhi Garhi reveal that the Indus Valley Civilization was a highly organized and technologically advanced urban society capable of sustaining large populations through coordinated systems of administration, craft production, and trade.

Consequently, Rakhi Garhi occupies a central place not only in archaeology but also in the broader study of South Asian history, social evolution, and ancient cultural development.

References

1. Archaeological Survey of India. *Excavation Reports on Rakhigarhi*. New Delhi.
2. Amarendra Nath. Excavation reports and field studies on Rakhigarhi (1997–2000).
3. Suraj Bhan. Early archaeological surveys of Haryana Harappan sites.
4. Mohenjo-daro and the Indus Civilization, edited by John

Marshall. London: Arthur Probsthain.
5. Rakhaldas Banerji. Archaeological writings on Indus Civilization.
6. The Indus Civilization — Mortimer Wheeler.
7. The Ancient Indus: Urbanism, Economy, and Society — Rita P. Wright.
8. The Indus Valley Civilization: A Contemporary Perspective — Gregory L. Possehl.
9. Ancient Cities of the Indus Valley Civilization — Jonathan Mark Kenoyer.
10. The Lost River: On the Trail of the Sarasvati — Michel Danino.
11. Shinde, Vasant et al. “An Ancient Harappan Genome Lacks Ancestry from Steppe Pastoralists or Iranian Farmers.” *Cell* (2019).
12. Possehl, Gregory L. *The Indus Age: The Beginnings*.
13. Kenoyer, Jonathan Mark. Studies on Harappan urbanism and material culture.

Rajo Dero

Abstract

Rajo Dero is a significant archaeological site located in Dadu District, Sindh, Pakistan. Situated south of the present-day village of Rajo Dero and approximately 14 kilometers northeast of the Chorlak of Gaj Nai, the site consists of two distinct mounds. Archaeological evidence indicates that the larger and higher mound belongs to the Amri or Rural Cultural Phase, while the smaller mound contains material associated with the Harappan urban tradition. The coexistence of these cultural phases at a single site makes Rajo Dero an important source for understanding cultural continuity and the transition from village-based communities to urban civilization in prehistoric Sindh.

Introduction

Rajo Dero is one of the most important archaeological sites in Dadu District because it preserves evidence of

multiple cultural phases that illuminate the development of ancient societies in Sindh. Located south of the modern village of Rajo Dero and approximately 14 kilometers northeast of the Chorlak of Gaj Nai, the site provides valuable insights into the evolution of human settlement from the Rural Cultural Phase to the urban stage of the Indus Valley Civilization.

The presence of both Amri and Harappan cultural remains at the site offers a rare opportunity to study the processes of social, economic, and technological transformation that led to the emergence of urbanism in the Indus region.

Geographical Location

Rajo Dero is situated within the Gaj Nai region, an area that has long supported human settlement due to the availability of water and fertile land. Gaj Nai, a seasonal stream originating in the Kirthar Mountains, has historically provided resources essential for agriculture, pastoralism, and permanent habitation.

The environmental setting of the site suggests that its inhabitants benefited from access to water, arable land, and natural resources, enabling the development of stable communities over an extended period. Such conditions were favorable for both early rural settlements and later urban development.

Archaeological Characteristics

One of the most distinctive features of Rajo Dero is its division into two separate mounds, each representing a different cultural phase.

The Larger and Higher Mound

The larger mound has yielded archaeological remains associated with the Amri Culture or Rural Cultural Phase. The material evidence suggests the existence of an early agricultural and pastoral community. Typical remains from this mound include:

- Early pottery traditions
- Handmade ceramic vessels
- Remains of residential structures
- Evidence of agricultural activities

- Flint tools

These findings reflect the lifeways of pre-urban communities that formed the foundation of later cultural developments in Sindh.

The Smaller Mound

The smaller mound has produced artifacts associated with the Harappan or urban phase of the Indus Valley Civilization. The material remains indicate a more advanced and organized settlement characterized by:

- Standardized pottery
- Fine ceramic craftsmanship
- Evidence of specialized production activities
- Organized residential occupation

The presence of these artifacts demonstrates that the site participated in the broader cultural and economic networks of the Indus Civilization.

Evidence of Cultural Evolution

The most significant aspect of Rajo Dero is the evidence it provides for cultural

continuity and transformation. The coexistence of Amri and Harappan remains at the same site indicates that human occupation persisted over a long period and underwent substantial social and economic changes.

The site illustrates the gradual process through which small agricultural communities evolved into more complex urban societies. This transition represents one of the most important developments in South Asian prehistory and is fundamental to understanding the rise of the Indus Valley Civilization.

Historical Significance

Rajo Dero holds exceptional importance for the study of prehistoric Sindh because it preserves evidence from two major cultural traditions. The site helps archaeologists examine how rural communities developed increasingly sophisticated forms of social organization, technology, and economic production.

The archaeological remains suggest that the Gaj Nai region was not only a center of early settlement but also became

integrated into the urban system of the Indus Civilization. Consequently, Rajo Dero serves as an important source for investigating the transitional period between pre-urban and urban societies in the Indus region.

Furthermore, the site contributes to broader discussions concerning the origins of urbanization, cultural interaction, and settlement development in ancient South Asia.

Conclusion

Rajo Dero is a unique and significant archaeological site in Dadu District that preserves evidence of both the Amri Rural Cultural Phase and the Harappan urban tradition. The larger mound represents an early village-based community, while the smaller mound reflects the characteristics of the mature urban culture of the Indus Valley Civilization. Together, these archaeological remains make Rajo Dero an important witness to the cultural evolution of ancient Sindh.

The site provides valuable evidence for understanding how rural settlements

gradually transformed into urban communities and contributes significantly to the study of the origins and development of the Indus Civilization. Future archaeological excavations and scientific investigations may further clarify the chronology, settlement structure, and cultural significance of this important site.

References

1. Ahmed, H. (2014). *Ancient Pakistan: An Archaeological History*. Lahore, Pakistan: Sang-e-Meel Publications.

2. Casal, J.-M. (1964). *Fouilles d'Amri*. Paris, France: Librairie C. Klincksieck.

3. Kenoyer, J. M. (1998). *Ancient Cities of the Indus Valley Civilization*. New York, NY: Oxford University Press.

4. Lambrick, H. T. (1997). *Sind: A General Introduction* (2nd ed.).

Jamshoro, Pakistan: Sindhi Adabi Board.

5. Majumdar, N. G. (1934). *Explorations in Sind*. Government of India Press.

6. Mughal, M. R. (1997). Ancient Sindh and the Indus Civilization. In F. A. Khan (Ed.), *Pakistan: Archaeology, History and Culture* (pp. 25–44). Islamabad, Pakistan: Department of Archaeology and Museums.

7. Possehl, G. L. (2002). *The Indus Civilization: A Contemporary Perspective*. Walnut Creek, CA: AltaMira Press.

8. Wheeler, R. E. M. (1968). *The Indus Civilization* (3rd ed.). Cambridge, United Kingdom: Cambridge University Press.

Rana Ghundai

Introduction

Rana Ghundai is one of the most significant archaeological sites in Balochistan for understanding the cultural developments that preceded the rise of the Indus Civilization. Excavations at the site have revealed five occupational layers, illustrating the gradual evolution of human society from simple village communities to more advanced cultural phases. The archaeological evidence from Rana Ghundai provides valuable insights into the economic, social, technological, and religious life of prehistoric communities in the region.

In 1951, the archaeologist A. G. Ross conducted investigations at the site. His findings contributed significantly to the understanding of early agricultural cultures in Balochistan and their

relationship with the later urban traditions of the Indus Valley.

Geographical Background

Rana Ghundai is located in northern Balochistan, a region that has long served as an important cultural crossroads between the Indus Valley, Afghanistan, and Iran. Owing to its strategic location, the area witnessed the development of several prehistoric cultures that played a vital role in the cultural history of South Asia.

Cultural Stratigraphy and Settlement Development

Archaeological excavations at Rana Ghundai revealed five occupational layers. The two lowest layers belong to an early village culture characterized by a simple agrarian and pastoral way of life. The inhabitants of these levels used handmade pottery and stone tools and lived in huts constructed from locally available materials.

The upper layers indicate a gradual process of cultural advancement. The inhabitants of these later phases

possessed improved technological skills and produced pottery on the potter’s wheel, marking an important development in ceramic technology. This transition reflects broader changes in social organization and craftsmanship.

Development of Pottery Production

One of the most notable features of Rana Ghundai is its pottery. The inhabitants of the later occupational levels manufactured vessels on the potter’s wheel and decorated them with artistic designs. The pottery was first coated with red and yellow slips and then painted with black motifs and patterns.

These decorative designs include geometric elements and artistic motifs that demonstrate a high degree of craftsmanship. Similar ceramic traditions have been identified at other prehistoric sites in Balochistan, such as Nal and the Quetta Valley cultural complexes.

Economy and Subsistence

The economy of the early inhabitants of Rana Ghundai was based primarily on agriculture and animal husbandry. Archaeological evidence suggests that they cultivated crops and raised domesticated animals, which provided food and other essential resources.

Livestock breeding played an important role in the economic life of the community, while agricultural production formed the foundation of their subsistence system. This economic pattern closely resembles that of other contemporary settlements in prehistoric Balochistan.

Religious Beliefs

Among the important discoveries at Rana Ghundai are terracotta figurines representing a Mother Goddess. These figurines provide valuable evidence regarding the religious beliefs of the settlement’s inhabitants. Archaeologists generally interpret such figurines as symbols of fertility, prosperity, and agricultural abundance.

The worship of a Mother Goddess is a recurring feature in many prehistoric

cultures of Balochistan, Sindh, and the wider Indus region, suggesting the importance of fertility cults in early farming societies.

Relationship with the Indus Civilization

The upper occupational levels of Rana Ghundai show clear evidence of cultural developments associated with the emergence of urban traditions. Advances in pottery production, the presence of religious figurines, and increasing social complexity indicate that the settlement formed part of the broader cultural processes that eventually contributed to the rise of the Indus Civilization.

For this reason, Rana Ghundai is regarded as one of the important prehistoric sites that help archaeologists understand the transition from village-based societies to urban civilization in South Asia.

Conclusion

Rana Ghundai occupies an important place in the archaeology of Balochistan

and the prehistoric history of the Indus region. The five occupational layers discovered at the site provide a valuable record of cultural evolution, documenting the transformation of simple village communities into more advanced societies. From handmade pottery and stone tools to wheel-made painted ceramics and religious figurines, the archaeological remains of Rana Ghundai offer crucial evidence for understanding the origins and development of early civilization in the northwestern regions of the Indian subcontinent.

References

1. Kenoyer, J. M. (1998). *Ancient Cities of the Indus Valley*

Civilization. Karachi, Pakistan: Oxford University Press.

2. Possehl, G. L. (2002). *The Indus Civilization: A Contemporary Perspective*. Walnut Creek, CA: AltaMira Press.

3. Ross, A. G. (1951). *Archaeological Survey and Investigations at Rana Ghundai, Baluchistan*. Archaeological Survey Reports.

4. Shaffer, J. G. (1992). The Indus Valley, Baluchistan, and Helmand Traditions: Neolithic through Bronze Age. In R. W. Ehrich (Ed.), *Chronologies in Old World Archaeology* (3rd ed., pp. 441–464). Chicago, IL: University of Chicago Press.

5. Wheeler, R. E. M. (1968). *The Indus Civilization* (3rd ed.). Cambridge, England: Cambridge University Press.

Rangpur

Introduction

Rangpur is an important archaeological site of the Indus Valley Civilization (IVC), situated near the village of Vanala in Chuda Taluka of Surendranagar District, Gujarat, India. The site lies on the Saurashtra Peninsula between the Gulf of Khambhat and the Gulf of Kutch, which gave it strategic importance in ancient times due to its connection with inland and maritime trade routes. Rangpur holds particular archaeological significance because it has been recognized as a “type site” for the Late Harappan cultural phase, from which the term “Rangpur Culture” was developed.

The Indus Valley Civilization was one of the earliest urban civilizations in the world, with its principal centers

extending across present-day Sindh, Punjab, Balochistan, and northwestern India. While major urban centers such as Mohenjo-Daro, Harappa, and Dholavira are more widely known, regional settlements such as Rangpur provide crucial insights into the expansion, transformation, and continuity of Harappan culture after the decline of its urban centers. Archaeological findings from Rangpur demonstrate that the people of the Indus Civilization were not confined to Sindh and Punjab alone but had expanded their cultural, agricultural, and economic activities into regions such as Gujarat and Saurashtra.

Geographical Location and Environmental Setting

Rangpur is located approximately at 22°26′ North latitude and 71°55′ East longitude in Surendranagar District, Gujarat. The site is situated on the fertile alluvial plains associated with the Bhadar River system, where access to water and arable land created favorable conditions for human settlement. The riverine environment contributed significantly to agricultural productivity and pastoral subsistence.

The Saurashtra region experiences a semi-arid climate characterized by relatively low rainfall. Nevertheless, seasonal rivers and monsoon flooding enriched the soil, making agriculture feasible. Archaeological evidence suggests that the inhabitants of Rangpur practiced agriculture dependent upon rainfall and seasonal flooding, cultivating crops such as rice, pearl millet (bajra), and other grains.

Geographically, Rangpur’s location near coastal areas enhanced its strategic importance, linking it with maritime trade networks of the Indus Civilization. Scholars suggest that Rangpur functioned as an intermediary settlement between inland agrarian communities and coastal trade centers, particularly sites such as Lothal, which served as major maritime hubs during the Harappan period.

Discovery and Archaeological Excavations

Rangpur first attracted archaeological attention during the early decades of the twentieth century. Initial excavations were conducted in 1934–35

by **M. S. Vats** of the Archaeological Survey of India (ASI), who uncovered pottery and artifacts displaying distinct similarities with Harappan material culture. These discoveries established Rangpur as a significant archaeological settlement rather than an ordinary rural habitation.

Subsequent investigations were carried out in 1939 by **G. S. Ghurye** and in 1947 by **M. G. Dikshit**, whose excavations provided important information regarding the multiple occupational phases of the site. Their findings indicated that Rangpur had remained inhabited over a prolonged historical period.

The most comprehensive excavations at Rangpur were conducted between 1953 and 1956 under the supervision of **S. R. Rao**, one of India’s leading archaeologists. Rao’s investigations uncovered a continuous cultural sequence extending from the Mature Harappan period to later post-Harappan phases. This research firmly established Rangpur as a crucial site for understanding the transformation and

continuity of the Indus Valley Civilization during its later stages.

Historical Significance of Rangpur

Rangpur is considered an important example of the southern expansion of the Indus Valley Civilization. Compared with large urban centers such as Mohenjo-Daro and Harappa, Rangpur was a relatively smaller settlement; however, the archaeological evidence demonstrates the adaptability of Harappan communities in adjusting to new ecological environments.

The remains discovered at Rangpur indicate that its inhabitants practiced agriculture, pastoralism, craft production, and regional trade. Particularly significant is the discovery of evidence for rice cultivation, which broadens the understanding of Harappan agriculture beyond its conventional association with wheat and barley.

Furthermore, artifacts including pottery, beads, copper implements, shell objects, and residential structures demonstrate that Rangpur formed an active

component of the wider Harappan cultural sphere. During the Late Harappan period especially, the emergence of local cultural characteristics suggests a gradual transformation of Harappan traditions into regionally adapted forms.

Cultural Phases of Rangpur

Archaeological excavations at Rangpur reveal that the site remained inhabited over a long period and passed through several cultural stages. The excavations conducted by **S. R. Rao** provided a clear understanding of the site's cultural evolution and divided its occupational history into distinct phases. These phases are highly important for understanding the growth, transformation, and decline of the Indus Valley Civilization, while also illustrating how Harappan traditions merged with local cultural elements in Gujarat.

1. Pre-Harappan Phase

The earliest occupation at Rangpur dates to approximately **3000 BCE**. During this period, the inhabitants had not yet developed a fully urban way of

life and primarily relied upon hunting, food gathering, and early pastoral activities. Excavations uncovered small stone implements known as **microliths**, which were likely used for hunting and daily subsistence. The absence of significant pottery remains suggests that this was still an early stage of settlement development.

2. Mature Harappan Phase

Between approximately **2000 BCE and 1500 BCE**, Rangpur developed into a more organized settlement under the influence of Harappan civilization. Distinctive features of Harappan culture became visible during this period, including standardized pottery, residential structures, drainage facilities, and agricultural practices.

Evidence of **rice cultivation** discovered at the site is particularly important, as it demonstrates the agricultural diversity of the Harappans. In addition, crops such as **pearl millet (bajra)** and other grains were cultivated. Pottery decorated with geometric motifs in black paint, characteristic of Harappan craftsmanship, indicates strong cultural

and economic connections with other regions of the civilization.

3. Late Harappan or Transitional Phase

After approximately **1500 BCE**, the cultural character of Rangpur gradually changed. Standardized Harappan pottery began to decline and was increasingly replaced by local ceramic styles, while urban characteristics slowly weakened. During this phase, the settlement acquired a more rural character, with greater dependence on agriculture and animal husbandry.

Archaeological evidence from this period suggests that although the centralized urban system of the Indus Civilization was declining, cultural continuity persisted in regional settlements such as Rangpur. This phase represents an important transition between Harappan traditions and later local cultures.

4. Lustrous Red Ware Culture

Between approximately **1000 BCE and 800 BCE**, Rangpur witnessed the emergence of a new cultural tradition

known as the **Lustrous Red Ware Culture**. Archaeologists discovered finely polished red pottery distinct from earlier Harappan ceramics. This phase represents an important cultural bridge between the Indus Civilization and later Chalcolithic and Early Iron Age traditions.

Settlement Pattern and Population

Rangpur appears to have been a relatively small but organized settlement. Archaeologists suggest that it was not a major urban center but rather a modest agrarian and trade-oriented community inhabited by several hundred individuals. The local economy was based primarily on agriculture, pastoralism, craft production, and regional exchange.

The settlement layout indicates that houses were clustered together in small residential groups. Unlike the carefully planned grid pattern of cities such as Mohenjo-Daro, Rangpur developed in a more organic and locally adapted manner. Areas associated with food storage, domestic activities, and waste disposal have also been identified,

suggesting a structured social organization.

The inhabitants of Rangpur most likely lived in family-based agrarian and pastoral communities. Archaeological evidence for domesticated animals, including cattle, buffaloes, sheep, and goats, demonstrates the importance of animal husbandry alongside crop cultivation.

Architectural Features

The architectural remains at Rangpur reveal how its inhabitants adapted to local environmental conditions and limited resources. Unlike Mohenjo-Daro and Harappa, where baked bricks were extensively used, Rangpur relied primarily upon **mud bricks** and timber.

Residential Structures

Excavations uncovered several **rectangular houses** constructed from mud bricks supported by wooden posts. Walls were plastered with mud, while roofs were likely made of thatch or wood. These structures indicate modest

but functional dwellings suitable for the semi-arid environment of Gujarat.

Many houses were constructed on **raised platforms**, likely intended to protect inhabitants from seasonal flooding and water damage. Such planning reflects practical engineering knowledge and environmental adaptation among the residents.

Drainage System

Evidence of **bathrooms and drainage channels** constructed with kiln-burned bricks has been found at Rangpur, reflecting continuity with Harappan traditions of sanitation and water management. Although the drainage system was less sophisticated than those of major urban centers like Mohenjo-Daro, it nevertheless demonstrates an organized approach to public hygiene.

Settlement Organization

Unlike major Harappan cities, Rangpur lacked large fortified citadels or monumental public buildings. Streets were relatively narrow and irregular,

shaped according to the local topography rather than strict urban planning. This suggests that Rangpur functioned primarily as a rural and regional settlement rather than a political or administrative center.

Material Culture

The artifacts discovered at Rangpur provide valuable insights into the social, economic, and cultural life of its inhabitants.

Pottery and Ceramics

Pottery represents one of the most significant categories of material remains at Rangpur. During the Harappan period, archaeologists recovered **black-and-red ware pottery** decorated with geometric motifs, lines, and painted designs. Different vessels were used for storage, cooking, and ritual purposes.

In later phases, the appearance of **Lustrous Red Ware pottery** reflects changing artistic traditions and the gradual localization of cultural practices.

Ornaments and Personal Adornment

A variety of beads made from **agate, carnelian, jasper, and steatite** have been recovered from the site. These ornaments were likely used not only for personal decoration but also as indicators of social status and participation in trade networks.

Shell bangles and decorative objects indicate contact with coastal regions and demonstrate the existence of long-distance exchange systems.

Tools and Metal Objects

Copper and bronze tools, including axes, blades, and small implements, were discovered at Rangpur, suggesting their use in agriculture, woodworking, and daily activities. Stone tools also remained in use, reflecting continuity with earlier technological traditions.

Craft Production

Archaeological evidence points to the production of beads, shell ornaments, and pottery at Rangpur. These findings

indicate that the inhabitants were engaged not only in agriculture but also in specialized crafts, some of which may have been produced for exchange with neighboring settlements.

Economy and Economic Structure

The economy of Rangpur was primarily based on **agriculture, animal husbandry, craft production, and regional trade**. Like many regional settlements of the Indus Valley Civilization, the inhabitants of Rangpur developed an economic system closely adapted to the natural environment of Gujarat’s semi-arid landscape. Agriculture and pastoralism formed the backbone of subsistence, while craft specialization contributed to local and regional exchange.

Archaeological findings suggest that the people of Rangpur cultivated crops, raised domesticated animals, and produced handmade goods that may have circulated through regional trade networks. The settlement’s economy appears to have combined household-level production with broader systems of

exchange linking Rangpur to neighboring Harappan centers.

Agriculture and Cultivation

The agricultural system of Rangpur provides important insights into the subsistence strategies of the Indus Valley Civilization. Archaeobotanical remains recovered from excavations indicate that **pearl millet (bajra)** was widely cultivated and likely served as one of the staple food crops due to its suitability for semi-arid climatic conditions.

Particularly significant is the evidence for **rice cultivation**, which broadens scholarly understanding of Harappan agriculture beyond its traditional association with wheat and barley. The presence of rice suggests that agricultural practices in Harappan settlements varied according to ecological conditions and regional needs.

Agriculture at Rangpur appears to have depended primarily on **rain-fed farming and seasonal flooding**, rather than on elaborate irrigation

systems. No substantial evidence of canals, reservoirs, or advanced hydraulic engineering similar to those found at some other Harappan sites has been discovered. This suggests that the inhabitants relied upon monsoon rainfall and seasonal river systems to sustain agricultural productivity.

Diet and Animal Resources

The diet of Rangpur's inhabitants was based on a combination of **plant and animal resources**. Staple foods included pearl millet, rice, and possibly other grains, while domesticated animals provided meat, milk, and other nutritional resources.

Excavations have yielded faunal remains of **cattle, buffaloes, sheep, goats, and pigs**, indicating the importance of domesticated livestock in daily life. These animals were valuable not only for meat consumption but also for dairy production, including milk and milk-derived products.

The dietary pattern of Rangpur was likely centered upon grain-based foods supplemented by dairy and limited meat

consumption. Hearths and cooking areas discovered within domestic structures indicate that food preparation was carried out at the household level using relatively simple techniques.

Craft Production and Trade

The inhabitants of Rangpur demonstrated considerable skill in **craft production**, including bead-making, pottery manufacture, shell working, and limited metallurgical activities. Beads crafted from materials such as **agate, carnelian, and jasper** indicate specialized craftsmanship and participation in broader cultural and commercial networks.

The discovery of shell bangles and marine materials suggests contact with **coastal regions and maritime trade centers**, especially settlements such as Lothal. It is likely that Rangpur maintained connections with regional trade systems through which raw materials and finished goods circulated.

The presence of standardized Harappan pottery and ornamental objects further indicates that Rangpur participated in

the wider economic network of the Indus Valley Civilization. Although it was not a major urban center like Mohenjo-Daro or Harappa, Rangpur nevertheless functioned as an important regional settlement with economic significance.

Significance of Rangpur in the Indus Valley Civilization

Rangpur is regarded as one of the most significant archaeological sites for understanding the **Late Harappan phase** of the Indus Valley Civilization. The site serves as the defining example of the **Rangpur Culture**, representing an important transitional phase between the Mature Harappan Civilization and later regional traditions.

The significance of Rangpur can be summarized in several ways:

First, it provides evidence for the **southern expansion** of the Indus Valley Civilization into Gujarat and the Saurashtra region.

Second, the site demonstrates that **cultural continuity persisted** even

after the decline of the major urban Harappan centers.

Third, evidence for the cultivation of **rice and millet** expands scholarly understanding of Harappan agricultural diversity.

Fourth, pottery, beads, and trade-related materials indicate that regional settlements remained economically interconnected through exchange networks.

Fifth, Rangpur challenges the idea of an abrupt collapse of the Indus Civilization by demonstrating a process of **gradual transformation and regional adaptation**.

Conclusion

Rangpur, Gujarat, occupies an important place in the study of the Indus Valley Civilization because it provides valuable evidence regarding both the expansion and transformation of Harappan culture. Archaeological discoveries from the site reveal that the inhabitants maintained a livelihood based on agriculture, animal husbandry, craft production, and trade

while adapting effectively to local environmental conditions.

The study of Rangpur further demonstrates that the Indus Valley Civilization was neither culturally uniform nor static. Instead, it evolved differently across regions, adapting to local ecological and social circumstances. In this regard, Rangpur represents an essential archaeological site for understanding the resilience, continuity, and regional transformation of Harappan civilization in western India.

References

1. Rao, S. R. *Rangpur and Other Explorations in Gujarat*. Archaeological Survey of India, New Delhi.
2. Rao, S. R. *Lothal and the Indus Civilization*. Bombay: Asia Publishing House.
3. Mohenjo-Daro and the Indus Civilization by Sir John Marshall. London: Arthur Probsthain, 1931.
4. Banerji, R. D. *The Lost Civilization of the Indus Valley*. Calcutta.

5. The Indus Civilization by Mortimer Wheeler. Cambridge University Press.
6. A History of Ancient and Early Medieval India by Upinder Singh. Pearson Education, 2008.
7. Gregory L. Possehl. *The Indus Civilization: A Contemporary Perspective*. AltaMira Press.
8. Bridget Allchin and Raymond Allchin. *The Rise of Civilization in India and Pakistan*. Cambridge University Press.
9. Archaeological Survey of India (ASI) excavation reports on Rangpur, Gujarat.
10. Dikshit, M. G. Preliminary Archaeological Reports on Rangpur Excavations.

Rehman Dheri

Introduction

Rehman Dheri is one of the most significant pre-Harappan archaeological

sites of the Indus Valley Civilization, located near Dera Ismail Khan in the present-day province of Khyber Pakhtunkhwa, Pakistan. Occupied approximately from **3300 BCE to 1900 BCE**, the site is regarded as one of the earliest known examples of planned urban settlement in South Asia. It is particularly notable for its organized street system, rectangular settlement pattern, mud-brick architecture, and evidence of early craft specialization, all of which contribute substantially to our understanding of the developmental stages of the Indus Civilization.

The site is especially important because it preserves cultural elements that later emerged more fully in the **Kot Diji Culture** and subsequently in the **Mature Indus Civilization**. In this context, Rehman Dheri is often interpreted as a crucial **transitional phase** in the evolution of urbanism within the Indus region.

Rehman Dheri consists of a low rectangular mound covering approximately **22 hectares**, rising nearly **4.5 meters** above the surrounding plain. Archaeological

remains include a network of planned streets, mud-brick walls, pottery fragments, kiln remains, and evidence of specialized craft activities. These findings reflect a socially organized community possessing considerable economic and technological sophistication.

Geographical Location and Environmental Context

Rehman Dheri is situated in the **Gomal Plain**, within the Dera Ismail Khan district of Khyber Pakhtunkhwa, Pakistan. The site lies approximately **20–22 kilometers northwest of Dera Ismail Khan city**. The region is part of the wider drainage system of the **Indus River**, with the **Gomal River**—an important tributary of the Indus—playing a central role in supporting fertile agricultural lands and sustaining early human settlement.

Geographically, the area occupied a strategic position linking **Central Asia, Afghanistan, Balochistan, and the Indus Valley**, thereby facilitating movement, cultural interaction, and long-distance trade. Consequently,

Rehman Dheri functioned not merely as a local settlement but also as a center of broader commercial and cultural significance.

Several other archaeological sites have been identified within the Gomal Plain, including Gumla, Hathala, Jhandi Babar, and Hisham Dheri. Together, these sites represent a broader cultural zone that played a significant role in the emergence of early urbanism and agricultural development.

Discovery and Archaeological Excavations

Rehman Dheri was first identified and systematically explored during **1970–1971** by the renowned Pakistani archaeologist Ahmad Hassan Dani, who recognized its historical and archaeological importance. Subsequently, systematic excavations began in **1976** under the direction of Farzand Ali Durrani and continued intermittently until **1991**.

Archaeologists employed **stratigraphic excavation methods** to investigate the site's multiple cultural layers. Findings

revealed that Rehman Dheri was a deeply stratified settlement characterized by continuous occupation over several centuries. Recent archaeological studies suggest the presence of nearly **18 occupational layers**, reflecting a long sequence of social and cultural development.

Excavations uncovered planned streets, mud-brick structures, craft-production areas, pottery kilns, bead-manufacturing evidence, and signs of semi-industrial activity. Additionally, archaeologists recovered painted pottery, seals, copper objects, and ornaments made from semi-precious stones, demonstrating the technological sophistication and economic organization of the settlement.

According to archaeological scholarship, the significance of Rehman Dheri lies in the fact that it exhibits clear evidence of **urban planning, craft specialization, trade, and social organization** prior to the emergence of the Mature Indus Civilization. Therefore, the site occupies a foundational position in the study of **early urbanism in South Asia**.

Cultural Phases and Developmental Sequence

Archaeological evidence from Rehman Dheri demonstrates that the site passed through multiple cultural phases, making it essential for understanding the early urban evolution of the Indus Valley region. Scholars generally divide the developmental history of the site into three principal stages: the **Tochi-Gomal Phase**, the **Kot Diji Phase**, and a **Transitional or Declining Phase**.

1. Tochi-Gomal or Pre-Kot Diji Phase (c. 3340–2850 BCE)

This represents the earliest occupational phase of Rehman Dheri and is commonly referred to as **Rehman Dheri I (RHD-I)**. It reflects the development of an indigenous agricultural and craft-producing culture in northwestern Pakistan. During this period, settlements were established near perennial water sources, and the economy was primarily based on **agriculture and animal husbandry**.

Archaeological findings indicate that the inhabitants cultivated **wheat and**

barley, while domestic animals included cattle, sheep, goats, and buffalo. Evidence of hunting and fishing also suggests the existence of a **mixed subsistence economy**.

One of the most distinctive characteristics of this phase is its **high-quality ceramic tradition**. Most pottery vessels were wheel-made, although some handmade examples have also been identified. Pottery surfaces, often red or buff in color, were decorated with black, brown, and white painted motifs, including geometric designs, animal depictions, pipal leaves, fish, and symbolic patterns. These artistic expressions reflect both technological advancement and symbolic creativity.

2. Kot Diji Phase (c. 2850–2500 BCE)

The **Kot Diji Phase** marks the most advanced developmental stage of Rehman Dheri, during which the settlement acquired more pronounced urban characteristics. Archaeological remains from this period reveal clear evidence of **Kot Dijian cultural traits**, including distinctive ceramics,

architectural organization, and increasingly complex social structures.

During this phase, settlement organization became more stable, and **craft specialization** intensified. Buildings constructed from mud bricks, organized streets, and enclosure walls surrounding the settlement suggest the existence of administrative coordination and advanced planning.

Excavations have yielded **Kot Dijian-style pottery**, painted ceramics, seals, copper artifacts, and ornaments made from semi-precious stones, indicating both cultural continuity and interaction with neighboring regions.

3. Transitional and Declining Phase (c. 2500–1900 BCE)

With the rise of the **Mature Indus Civilization**, the significance of Rehman Dheri gradually diminished. Archaeological evidence suggests that the site was largely abandoned by the middle of the third millennium BCE. Although limited traces of later occupation exist, there is little evidence of major architectural activity or

organized urban settlement during this period.

Researchers suggest that factors such as **population movement, shifts in trade networks, or environmental changes** may have contributed to the decline of the settlement.

Settlement Pattern and Urban Organization

Rehman Dheri is widely regarded as one of the earliest examples of **planned urban settlement** in South Asia. Covering approximately **22 hectares**, the site likely supported a substantial population for its time.

Excavations reveal that the settlement was systematically divided into **rectangular blocks**, interconnected through a network of streets and lanes. This arrangement appears to represent an early precursor to the urban planning later observed at mature Indus cities such as Mohenjo-daro and Harappa.

The settlement was enclosed by **protective walls**, which may have served both defensive purposes and

administrative control, further reflecting an organized and structured society.

Architectural Features

A defining characteristic of Rehman Dheri is its **grid-iron urban layout**, in which streets intersected at near right angles, dividing the settlement into orderly rectangular sections.

Most structures were built using **mud bricks**, and excavations have uncovered foundations of walls, residential units, workshops, and kilns. A **massive enclosing wall** surrounding the settlement further emphasizes the planned and fortified character of the site.

Evidence of **kilns, metalworking activities, and craft-production areas** suggests an early functional division between residential and industrial spaces within the settlement.

Material Culture

Pottery

The pottery assemblage of Rehman Dheri represents one of the most significant aspects of its material culture. Ceramic vessels were predominantly wheel-made and demonstrate a high degree of technical refinement. Pottery surfaces were decorated with geometric, floral, and zoomorphic motifs painted in black or dark brown on red or buff slips.

Certain pottery fragments contain **graffiti marks and symbolic signs**, which some scholars interpret as possible precursors to the later **Indus script**.

Seals and Figurines

A limited number of **seals** have been discovered at Rehman Dheri, depicting animals such as scorpions, goats, and other creatures. Although these seals lack inscriptions, they are considered early antecedents of the iconic seals of the Mature Indus Civilization.

Excavations also uncovered numerous **terracotta figurines**, including both

human and animal forms. Female figurines, in particular, are often interpreted as representations associated with fertility beliefs or ritual symbolism.

Ornaments and Craft Production

Archaeologists recovered beads made from **lapis lazuli, turquoise, carnelian**, and other semi-precious stones, reflecting advanced craftsmanship and long-distance exchange networks. Since many of these materials were not locally available, their presence provides strong evidence for regional and interregional trade.

Economy, Industry, and Trade

The economy of Rehman Dheri was fundamentally based on **agriculture, animal husbandry, craft production, and trade**.

Agricultural practices focused primarily on the cultivation of **wheat and barley**, while domesticated animals supplied food, dairy products, and labor for farming activities.

Craft industries included **pottery production, bead-making, copper working, and terracotta figurine manufacture**. Excavations uncovered kilns, ash deposits, and stone-working debris, indicating organized semi-industrial activity.

Trade connections linked Rehman Dheri with **Afghanistan, Central Asia, Balochistan, and various regions of the Indus Valley**. The discovery of imported materials such as lapis lazuli particularly suggests commercial interaction with regions of present-day Afghanistan.

Cultural and Historical Significance

Rehman Dheri occupies a highly significant position in the ancient history of South Asia because it provides crucial evidence for the emergence of **early urbanism** in the region. The site demonstrates that the Mature Indus Civilization did not appear suddenly; rather, it evolved gradually over many centuries through processes of social, economic, and technological development.

One of the principal contributions of Rehman Dheri lies in its evidence for **organized urban planning**, which later became a defining characteristic of major Indus cities such as Mohenjo-daro and Harappa. The planned street system, rectangular settlement blocks, enclosure walls, and specialized craft-production areas indicate a society capable of coordinated administration, resource management, and collective planning.

Furthermore, discoveries of **pottery graffiti, seals, symbolic motifs, and animal representations** provide valuable insight into the developmental origins of the symbolic systems later associated with the Mature Indus Civilization. Although a fully developed writing system had not yet emerged at Rehman Dheri, the presence of these symbols suggests an important stage in the evolution of communication and administrative practices.

The significance of Rehman Dheri has been internationally recognized, and the site has been included on the tentative list of the UNESCO for potential World Heritage status because of its

exceptional contribution to the understanding of early urban development in South Asia.

Relationship with the Indus Valley Civilization

Rehman Dheri is widely regarded as an important **precursor to the Mature Indus Civilization**. Several cultural and architectural elements found at the site later appeared in more advanced forms at major Harappan urban centers.

For example:

- The **grid-based urban layout** later became a hallmark of cities such as Mohenjo-daro and Harappa.
- **Mud-brick architecture** at Rehman Dheri foreshadowed the standardized construction methods of the Mature Harappan period.
- **Animal motifs and seals** reveal continuity with the symbolic and administrative traditions of later Indus settlements.
- **Graffiti marks on pottery** are considered by many scholars to

represent an early developmental stage of the later **Indus script**.

- The growth of **craft specialization and long-distance trade** laid an economic foundation for the highly integrated Harappan urban system.

Thus, Rehman Dheri may be understood as an important **transitional cultural link**, bridging local agricultural communities with the sophisticated urban civilization that later flourished across the Indus Valley.

Comparative Analysis

A comparative examination of Rehman Dheri demonstrates that the site was more organized and advanced than many contemporary settlements of its time.

Rehman Dheri and Kot Diji

Kot Diji shares several cultural similarities with Rehman Dheri, including fortified settlement patterns, painted pottery traditions, and early urban organization. However, Rehman Dheri appears particularly remarkable

for its clearly defined **grid-based settlement planning**, which is more visibly organized.

Rehman Dheri and Gumla

Material culture at Rehman Dheri exhibits close affinities with Gumla, especially in pottery styles and cultural traditions. Nevertheless, Rehman Dheri stands out due to its larger settlement size, stronger evidence of urban planning, and greater specialization in craft production.

Rehman Dheri and Mohenjo-daro

A comparison with Mohenjo-daro suggests that although Rehman Dheri was not yet a mature urban center, it clearly anticipated many of the features later perfected at Mohenjo-daro, including organized street systems, architectural planning, and economic specialization.

Conclusion

Rehman Dheri is one of the most important archaeological sites in Pakistan and South Asia for

understanding the origins and evolution of the Indus Valley Civilization. Archaeological evidence from the site demonstrates that urban planning, specialized crafts, trade networks, and symbolic systems had already begun to develop long before the rise of the Mature Harappan Civilization.

The site’s planned settlement pattern, protective walls, evidence of industrial activity, and participation in long-distance exchange networks collectively confirm that the **Gomal region of northwestern Pakistan played a crucial role in the formative stages of Indus urbanism**. Therefore, Rehman Dheri should be viewed not merely as an archaeological settlement but as a fundamental cultural bridge in the intellectual, economic, and social evolution of the Indus Civilization.

References

1. Ahmad Hassan Dani. *History of Northern Areas of Pakistan*. Islamabad: National Institute of Historical and Cultural Research.
2. Farzand Ali Durrani. *Excavations in the Gomal Valley: Rehman Dheri Excavation Report No. 1*. *Ancient Pakistan*, Vol. 6, 1988.
3. Farzand Ali Durrani and Ihsan Ali. *Further Excavation at Rehman Dheri*. *Ancient Pakistan*, Vol. 7, 1991.
4. Gregory L. Possehl. *The Indus Civilization: A Contemporary Perspective*. Lanham: AltaMira Press, 2002.
5. Jonathan Mark Kenoyer. *Ancient Cities of the Indus Valley Civilization*. Karachi: Oxford University Press, 1998.
6. UNESCO. *Tentative List: Rehman Dheri Archaeological Site*.
7. Stuart Piggott. *Prehistoric India to 1000 B.C.* London: Penguin Books.

Rohel jo Kandh

Introduction

Rohel jo Kandh is an important archaeological site located within the Gaj Nai valley in Dadu District, Sindh, Pakistan. The site is associated with the early or rural cultural phase of the Indus Civilization. Situated approximately 8.5 kilometers inside the Gaj Nai region, it occupies a strategic geographical position that would have provided favorable conditions for ancient human settlement. The proximity of watercourses and fertile landscapes likely contributed to the establishment of a well-organized rural community in this area.

Archaeological Significance

Archaeological surveys and investigations conducted at Rohel jo Kandh have yielded a variety of pottery fragments, ceramic vessels, and other cultural materials. Comparative analysis of these artifacts indicates strong similarities with materials previously discovered at the renowned prehistoric sites of Nal in Balochistan and Amri in Sindh. These similarities suggest the existence of extensive cultural interactions and exchanges among settlements located across Sindh and neighboring regions during the prehistoric period.

Cultural Connections

The form, decoration, and craftsmanship of the pottery recovered from Rohel jo Kandh demonstrate that the site belonged to a cultural tradition that predated the mature urban phase of the Indus Civilization. The presence of ceramic types comparable to those found in the Nal and Amri cultural assemblages indicates that this settlement participated in the broader processes of cultural development that eventually contributed to the emergence of the Indus urban centers.

Such discoveries highlight the importance of rural communities in laying the foundations of one of the world's earliest civilizations.

Historical Importance

Rohel jo Kandh is significant for understanding the developmental stages of the Indus Civilization. The archaeological remains suggest that human occupation in the Dadu region and the foothills of the Kirthar Range dates back several millennia. Furthermore, the site provides valuable evidence for studying cultural contacts, trade networks, and technological influences between Sindh and Balochistan during the prehistoric era.

Conclusion

Rohel jo Kandh is one of the important archaeological sites of Sindh that offers valuable insights into the rural cultural phase of the Indus Civilization. The artifacts recovered from the site demonstrate strong connections with the Nal and Amri cultural traditions, underscoring the role of this settlement within a wider network of prehistoric

communities. Future scientific excavations and research have the potential to further clarify the historical significance of the site and contribute to a deeper understanding of the cultural evolution of the Indus Valley Civilization.

References

1. Lambrick, Hugh Trevor. (1964). *Sind: A General Introduction*. Jamshoro, Pakistan: Sindhi Adabi Board.

2. Majumdar, N. G. (1934). *Explorations in Sind*. Karachi: Government of Sindh.

3. Mughal, M. R. (1997). *Ancient Cholistan: Archaeology and Architecture*. Lahore: Ferozsons.

4. Piggott, S. (1950). *Prehistoric India*. Harmondsworth, England: Penguin Books.

5. Wheeler, R. E. M. (1968). *The Indus Civilization* (3rd ed.). Cambridge, England: Cambridge University Press.

Rojdi

Introduction

Rojdi is an important archaeological site associated with the Indus Valley Civilization (Harappan Civilization), situated in the Saurashtra region of Gujarat, India, on the northern bank of the Bhadar River in Gondal Taluka of Rajkot District. The site lies near the village of Shrinathgadh, approximately 16 kilometers from Gondal town. Rojdi is primarily associated with the Late Harappan or Post-Urban phase of the Indus Civilization, although evidence suggests that human occupation at the site may date from approximately 2500 BCE to 1800 BCE, with some indications of earlier activity as far back as 3500 BCE.

Rojdi is regarded as one of the representative sites of the “Sorath Harappan” cultural tradition. The site is particularly significant because it demonstrates regional variations within the Indus Civilization, especially in comparison with the major urban centers of Sindh, such as Mohenjo-daro. The archaeological evidence from Rojdi has enabled scholars to understand how local populations adapted to changing

environmental and socio-economic circumstances following the decline of the great Harappan cities.

Geographical Setting

Rojdi is situated in central Saurashtra, a semi-arid region characterized by seasonal rainfall and fluctuating climatic conditions. The site is located on the northern bank of the Bhadar River, a seasonal river dependent largely upon monsoon precipitation. Its proximity to the river provided favorable conditions for agriculture, water supply, and animal husbandry.

The geographical coordinates of the site are approximately 21°52′ North latitude and 70°55′ East longitude. Archaeological investigations indicate that Rojdi covered an area of approximately 4 to 7 hectares, consisting of a principal mound (Main Mound) along with peripheral extensions. Researchers suggest that the settlement possessed an oval or elliptical layout, enclosed by protective boundaries or defensive walls, indicating that the inhabitants considered both

habitation and security in their settlement planning.

Environmental Context

During the Harappan period, the environment of the Saurashtra region differed somewhat from present-day conditions, although it generally retained its semi-arid character. Annual rainfall was relatively limited and depended largely on southwest monsoon systems. Paleoenvironmental studies indicate that monsoon intensity gradually weakened during the Harappan period, resulting in increasingly dry climatic conditions.

Despite these environmental challenges, fertile alluvial soils along rivers such as the Bhadar supported agricultural activity. Archaeobotanical evidence demonstrates that the inhabitants of Rojdi cultivated drought-resistant crops, particularly millets, alongside barley and wheat. This agricultural adaptation reveals the community’s capacity to respond effectively to changing climatic circumstances.

Environmental reconstructions further suggest that between approximately 2500 BCE and 1700 BCE, the Saurashtra region experienced increasing aridity. However, there is no substantial evidence of an abrupt climatic catastrophe severe enough to destroy settlements such as Rojdi. Instead, local communities adapted to environmental transformations and successfully maintained agricultural production, pastoral activities, and daily life.

Importance of Rojdi

Rojdi holds exceptional importance for understanding the later phases of the Indus Civilization. Unlike major urban centers such as Mohenjo-daro and Harappa, which experienced decline and abandonment, Rojdi continued to sustain occupation for centuries. This continuity suggests that the decline of the Indus Civilization was neither sudden nor uniform across all regions.

The site also contributes significantly to the study of regional diversity within the Harappan world. Its settlement layout, pottery traditions, agricultural evidence, and subsistence strategies differ in

important ways from the urban centers of Sindh and Punjab. Consequently, Rojdi provides valuable insight into how localized rural communities adapted and persisted during the transformation of the broader Indus Civilization.

Discovery and Initial Survey

The archaeological significance of Rojdi became known during the mid-twentieth century, when extensive surveys of Harappan sites were initiated in Gujarat and the Saurashtra region. The site was formally identified in 1958–1959 by Indian archaeologist P. P. Pandya of the Archaeological Survey of India (ASI). Preliminary investigations at the site revealed pottery fragments, settlement remains, and other cultural materials associated with the Harappan tradition, thereby highlighting Rojdi’s archaeological importance.

Subsequently, during 1962–1963, the Gujarat State Department of Archaeology conducted preliminary excavations under the supervision of archaeologists M. A. Dhaky and J. M. Nanavati. Trial trenches on the Main Mound yielded red pottery sherds and

other diagnostic materials linked to the Indus Valley Civilization. These discoveries indicated that Rojdi belonged not to the urban core phase of the Harappan Civilization but rather to its later regional phase. The absence of certain artifacts commonly found in major urban centers—such as seals, goblets, and highly decorated ceramics—further emphasized the site's distinct regional identity.

Systematic Excavations and Archaeological Research

Comprehensive excavations at Rojdi commenced during 1982–1983 through a collaborative project between the Gujarat State Department of Archaeology and the University of Pennsylvania Museum. The excavations were directed by archaeologist Gregory L. Possehl, whose research substantially advanced scholarly understanding of the site.

Archaeological work continued over seven excavation seasons between 1982 and 1995. Investigations focused on the Main Mound, the South Extension, the North Slope, and areas

surrounding defensive structures and gateways. Excavations uncovered residential architecture, multi-room houses, fortification walls, storage facilities, pottery assemblages, faunal remains, and botanical evidence, all of which provided valuable insights into the economic and social life of the settlement.

Approximately twenty radiocarbon samples collected from the site enabled researchers to establish a refined chronology, indicating continuous occupation from around 2500 BCE to 1700 BCE.

Cultural Phases

Archaeological excavations demonstrate that Rojdi underwent three major cultural phases of occupation, designated as **Rojdi A**, **Rojdi B**, and **Rojdi C**.

1. Rojdi A (ca. 2500–2200 BCE)

This phase represents the earliest stage of settlement at Rojdi, characterized by relatively limited habitation. Architectural remains include simple

stone foundations supporting mud walls, earthen floors, hearths, and storage bins. Pottery from this phase is comparatively plain, exhibiting minimal decorative features. The evidence suggests the establishment of a small but permanent agrarian community.

2. Rojdi B (ca. 2200–2000 BCE)

The second phase reflects a period of demographic growth and greater settlement stability. Residential structures became more organized and robust, with stronger stone foundations and improved construction methods. Pottery traditions evolved with increased diversity in vessel forms and storage facilities, reflecting economic development and expanding domestic activities. This period marks a phase of social and economic consolidation.

3. Rojdi C (ca. 2000–1700 BCE)

The final phase of occupation represents the most developed stage of the settlement. Archaeological evidence reveals fortification walls, multi-room residential complexes, and a prominent architectural structure known as the

“Large Square Building.” Pottery production became more refined, while the spatial extent of occupation expanded significantly. Scholars associate this phase with the Post-Urban or Late Harappan period, during which regional settlements continued to flourish despite the decline of major urban centers.

Architectural Features

The architectural remains at Rojdi indicate that the settlement functioned primarily as a fortified rural community rather than a highly planned urban center. Construction materials consisted largely of locally available stone and mud rather than baked bricks. Most buildings were erected on rubble-stone foundations topped with mud walls.

One of the most distinctive features of Rojdi is the presence of curvilinear and polygonal architectural forms, which differ considerably from the rectilinear planning characteristic of major Harappan cities such as Mohenjo-daro. Whereas urban centers exhibited planned streets, drainage systems, and standardized brick construction, Rojdi’s

buildings appear to have developed in a more organic and clustered pattern.

Defensive Structures and Fortifications

A substantial defensive wall surrounded much of the settlement, enclosing it on three sides, while the Bhadar River provided natural protection on the fourth. Archaeologists also discovered a western gateway accompanied by fortified bastions, indicating that the inhabitants invested considerable effort in safeguarding the settlement.

Residential Structures

Excavations revealed multi-room houses, storage areas, hearths, courtyards, and domestic workspaces. The South Extension yielded evidence of clustered residential complexes likely occupied by extended families or closely connected households. The absence of palatial architecture, monumental public buildings, or centralized administrative complexes suggests a relatively egalitarian social structure with limited social stratification.

Architectural Importance of Rojdi

The architectural evidence from Rojdi demonstrates that the Indus Civilization was not limited solely to large urban centers. Rural settlements adapted their building traditions according to local environmental conditions and available resources. Rojdi, therefore, represents an important example of regional adaptation within the Harappan cultural sphere.

The site’s architectural remains provide valuable insight into defensive strategies, domestic organization, and local settlement planning during the Late Harappan period, thereby contributing significantly to broader understandings of cultural diversity within the Indus Civilization.

Material Culture

The archaeological remains discovered at Rojdi demonstrate that its material culture was primarily based on everyday utility, agrarian practices, and the effective use of local resources. Excavations yielded substantial quantities of pottery, stone tools, limited

metal objects, faunal remains, and botanical evidence, all of which provide valuable insights into the daily life and subsistence strategies of its inhabitants.

Pottery Assemblage

The pottery of Rojdi represents one of the most significant aspects of its material culture and is generally associated with the Sorath Harappan tradition. The ceramic assemblage primarily consists of fine red, buff, and occasionally grey wares made from carefully prepared clay. Archaeologists identified a wide variety of vessel forms, including bowls, globular jars, dishes, storage containers, and dishes-on-stands.

During the Rojdi A phase, pottery was comparatively simple and minimally decorated. However, in the subsequent Rojdi B and Rojdi C phases, ceramics became increasingly refined and technologically advanced. Certain pottery fragments bear graffiti marks and signs resembling the Indus script, indicating cultural connections with the broader Harappan tradition. Nevertheless, compared with the highly

decorated ceramics of urban centers such as Mohenjo-daro, Rojdi pottery appears to have been more practical and intended mainly for domestic use.

Tools and Metal Objects

Excavations at Rojdi uncovered a limited number of metal implements, particularly copper and bronze axes, which were likely employed for woodworking, agriculture, and construction-related activities. The absence of major metallurgical workshops or smelting facilities suggests that the inhabitants depended partly on external regions for metal resources.

Stone tools were recovered in considerable quantities, including chert blades, grinding stones, hand querns, and tools used in food preparation. These findings indicate that agricultural production and grain processing formed essential components of daily life at the settlement.

Faunal and Botanical Remains

Thousands of animal bones recovered from Rojdi include cattle, sheep, goats, and certain wild animals such as nilgai (blue bull antelope). These remains indicate that pastoralism constituted an important aspect of the local economy. Livestock served not only as sources of meat and dairy products but also as labor for agricultural activities.

Archaeobotanical evidence reveals the cultivation of millets, barley, wheat, and other crops. The predominance of millet cultivation particularly reflects adaptation to semi-arid climatic conditions. Such agricultural strategies demonstrate the inhabitants' resilience and ability to respond effectively to environmental challenges.

Economy

The economy of Rojdi was fundamentally based on an **agro-pastoral system**, integrating crop cultivation with animal husbandry. The inhabitants relied heavily on agriculture while simultaneously maintaining domesticated livestock, thereby achieving a considerable degree of economic self-sufficiency.

Agricultural production focused particularly on drought-resistant crops suitable for the semi-arid environment of Saurashtra. Cattle, sheep, and goats played essential roles in subsistence, providing meat, milk, labor, and agricultural support.

Evidence for long-distance trade, seals, standardized weights, or luxury objects remains limited at Rojdi, indicating that the settlement functioned primarily as a regional agrarian center rather than an urban commercial hub like Mohenjo-daro or Lothal. Nevertheless, interactions with neighboring Harappan settlements likely facilitated local exchange networks.

Social Life

The residential layout of Rojdi suggests a relatively egalitarian social organization. The absence of palatial buildings, elite residences, or centralized administrative complexes indicates that pronounced social hierarchy was either absent or minimally developed.

Most houses display broadly similar architectural patterns and appear to have accommodated extended family groups or closely related households. The clustered settlement arrangement reflects communal living, shared labor, and cooperation in everyday activities.

Archaeological evidence of infant burials within residential areas offers important insights into family practices and mortuary traditions within the Harappan cultural sphere. Daily life at Rojdi was closely associated with agriculture, animal husbandry, food preparation, and localized social interactions.

Significance of Rojdi

Rojdi is regarded as one of the principal representative sites of the **Sorath Harappan Culture**, making it exceptionally important for understanding regional diversity within the Indus Civilization. The site demonstrates that Harappan civilization extended beyond major urban centers to include smaller agrarian and rural settlements.

The long duration of occupation at Rojdi is especially significant because the settlement remained inhabited even after the decline of major urban centers such as Mohenjo-daro. This continuity challenges earlier interpretations that viewed the decline of the Indus Civilization as a sudden and universal collapse. Instead, Rojdi illustrates how regional communities adapted successfully to changing environmental and socio-political circumstances.

Conclusion

Rojdi constitutes a major archaeological site for understanding the later phases of the Indus Valley Civilization, particularly the Sorath Harappan cultural tradition of Saurashtra. The site offers valuable evidence regarding settlement organization, material culture, agricultural economy, and social structure during the transformation of the Harappan world.

The architectural remains, pottery traditions, agricultural practices, and relatively egalitarian settlement pattern reveal a resilient rural community capable of adapting to environmental

and cultural changes over several centuries. Consequently, Rojdi occupies a crucial place in discussions concerning the regional diversity, continuity, and transformation of the Indus Civilization.

References

1. Archaeological Survey of India. (1962–Present). *Indian archaeology: A review*. Government of India, Ministry of Culture.

2. Dhaky, M. A., & Nanavati, J. M. (1968). *Preliminary excavation reports on Rojdi, Gujarat*. Gujarat State Department of Archaeology.

3. Kenoyer, J. M. (1998). *Ancient cities of the Indus Valley civilization*. Oxford University Press.

4. Marshall, J. (Ed.). (1931). *Mohenjo-daro and the Indus civilization* (Vols. 1–3). Arthur Probsthain.

5. Nanavati, J. M., & Dhaky, M. A. (1966). *Archaeological investigations at Rojdi, Saurashtra*. Gujarat State Department of Archaeology.

6. Possehl, G. L. (1986). *Kuntasi and the Harappan civilization of Western India*. Oxford & IBH Publishing.

7. Possehl, G. L. (1989). *Harappan civilization in Gujarat: The Rojdi excavations and Sorath Harappan culture*. University Museum, University of Pennsylvania.

8. Possehl, G. L. (1999). *Indus age: The living traditions* (Vol. 2). Oxford & IBH Publishing.

9. Possehl, G. L. (2002). *The Indus civilization: A contemporary perspective*. AltaMira Press.

10. Wheeler, R. E. M. (1968). *The Indus civilization* (3rd ed.). Cambridge University Press.

Rupnagar

Introduction

Rupnagar Archaeological Site, formerly known as **Ropar** or **Rupar**, is one of the important and relatively larger archaeological sites associated with the Indus Valley Civilization. The site holds considerable historical and archaeological significance because it presents evidence of a long sequence of

human occupation extending from the Harappan period to later historical eras. Rupnagar is important not only because it represents one of the northern settlements of the Indus Civilization, but also because it provides evidence of cultural continuity over a prolonged period, offering valuable insight into social, economic, and civilizational transformations in the Indian subcontinent.

Rupnagar is studied alongside other major Indus Valley Civilization sites such as Harappa, Mohenjo-daro, Kalibangan, and Lothal. However, its distinctive importance lies in its cultural continuity. Archaeologists believe that the site remained inhabited even after the decline of the Harappan Civilization, making it a key location for understanding the continuity of ancient societies in the subcontinent.

Geographical Location

Rupnagar is located in the present-day state of Punjab, India, near the modern town of Rupnagar. The site lies approximately at **30.97° North latitude and 76.53° East longitude**

and stands at an average elevation of **260 meters (850 feet)** above sea level. Rupnagar occupies a strategically important geographical position on the bank of the Sutlej River, while the Shivalik Hills extend along the opposite side of the river.

This geographical setting made the region highly suitable for ancient settlement, as the river provided water resources, fertile land for agriculture, and transportation routes, while the nearby hills may have offered natural protection and access to mineral resources. Owing to its location along riverine networks, Rupnagar maintained connections with northwestern India, Punjab, and other settlements of the Indus Valley region. It may also have served as an important center for trade and cultural interaction between the Himalayan foothills and the plains.

Discovery and Archaeological Excavation

The archaeological importance of Rupnagar was systematically recognized during the twentieth century. Following preliminary surveys, organized

excavations were conducted under the supervision of the Archaeological Survey of India. In the 1950s, the distinguished Indian archaeologist Yajna Datta Sharma led major excavations at the site, which revealed evidence of several important cultural phases.

The excavations demonstrated that Rupnagar was not merely a Harappan site but a settlement that experienced continuous occupation across different historical periods. Archaeological findings revealed evidence of the Harappan phase, the Painted Grey Ware Culture, the Northern Black Polished Ware phase, the Śaka-Kushan period, the Gupta period, and the medieval era. Such cultural continuity places Rupnagar among the rare archaeological sites in South Asia where thousands of years of social and cultural evolution can be studied within a single location.

During excavations, archaeologists uncovered residential structures, pottery, metal objects, ornaments, seals, bone artifacts, and burial remains of considerable significance. In particular, pottery, beads, graves, and

structural remains associated with the Harappan phase suggest that Rupnagar functioned as an important settlement in the northern region of the Indus Civilization.

The discoveries at Rupnagar not only help define the geographical extent of the Indus Civilization but also confirm that Harappan cultural influence extended into the northern Punjab region. Furthermore, the site provides essential evidence for understanding post-Harappan social development, continuity of settlement, and the emergence of new cultural traditions in the Indian subcontinent.

Cultural Phases

Rupnagar Archaeological Site is particularly notable for its long and continuous cultural sequence. Archaeological excavations have demonstrated that the site passed through multiple cultural phases extending from approximately the second millennium BCE to the medieval period. Archaeologists generally divide the cultural sequence of Rupnagar into six major phases, each of which

contributes significantly to understanding the historical evolution of the Indian subcontinent.

1. Harappan or Indus Civilization Phase (c. 2000–1400 BCE)

This phase represents the earliest settlement of Rupnagar and is generally associated with the Late Harappan phase of the Indus Valley Civilization. Artifacts from this period include red pottery decorated with black painted motifs, seals, terracotta ornaments, stone beads, and copper objects. Burial remains and structural evidence indicate the existence of an organized social life and a settled community.

2. Painted Grey Ware Culture (c. 1200–800 BCE)

During this phase, significant transformations in settlement patterns and cultural practices became evident. The most characteristic artifacts are fine grey pottery decorated with black geometric designs. Some scholars associate this cultural phase with the early Vedic period. The presence of Painted Grey Ware at Rupnagar

demonstrates continuity of occupation after the decline of the Harappan Civilization.

3. Northern Black Polished Ware Phase (c. 600–200 BCE)

This phase corresponds with a period of increasing urbanization, trade, and political organization in the Indian subcontinent. The archaeological record indicates the widespread use of highly polished black pottery. Iron tools also became increasingly common, suggesting advancements in agricultural production and economic activities.

4. Śaka-Kushan Period (c. 200 BCE – 300 CE)

During this period, Rupnagar became integrated into broader regional trade and political networks. Excavations have yielded coins, ornaments, metal objects, and pottery, indicating active cultural and commercial connections with neighboring regions and political centers.

5. Gupta Period (c. 320–600 CE)

This phase corresponds to a period often described as one of intellectual, religious, and cultural development in South Asia. Archaeological findings from Rupnagar, including pottery, metal tools, coins, and religious objects, demonstrate the continued occupation and cultural vitality of the settlement.

6. Medieval Occupation

Human habitation at Rupnagar continued into the medieval period. Archaeological evidence from this phase indicates that despite political and economic transformations, the settlement remained inhabited and retained regional significance.

Settlement Pattern and Urban Organization

The settlement planning of Rupnagar appears comparatively modest when compared with larger Indus urban centers, yet it displays several organized urban characteristics. Archaeological evidence suggests that residential structures were systematically arranged and primarily constructed of mud bricks, although

baked bricks were also used in certain areas.

Its proximity to the Sutlej River provided access to water, fertile agricultural land, and transportation routes, all of which contributed to sustained habitation. Archaeologists suggest that Rupnagar functioned as a regional center linked with smaller surrounding settlements.

Residential structures indicate the presence of multi-room houses, with designated areas for storage and domestic activities. Limited evidence of drainage systems has also been identified, suggesting a degree of urban management and planning.

Architectural Features

The architectural remains of Rupnagar exhibit several elements characteristic of Harappan traditions, although the settlement was not as architecturally complex as major urban centers such as Mohenjo-daro or Harappa.

Most structures were constructed using mud bricks and compacted earth, while baked bricks were employed in some

sections. Excavations have uncovered walls, rooms, courtyards, and hearths, offering insight into domestic architectural practices.

Burial practices from the Harappan phase have also been discovered. Several graves contained pottery, ornaments, and utilitarian objects alongside human remains, suggesting the existence of religious or cultural beliefs concerning death and the afterlife.

Material Culture

The material culture uncovered at Rupnagar provides valuable evidence for understanding the social, economic, and artistic life of its inhabitants. The archaeological materials can be broadly classified into several categories:

Pottery

Large quantities of red pottery decorated with black painted designs, storage jars, and domestic vessels have been recovered from the Harappan phase. These ceramics frequently display geometric motifs, linear

decorations, floral patterns, and stylized natural forms.

Seals and Beads

A limited number of seals have been discovered, likely used for administrative or commercial purposes. Beads made of stone, faience, and semi-precious materials indicate advanced craftsmanship and long-distance trade connections.

Metal Objects

Evidence for the use of copper and later iron has been recovered in the form of tools, knives, needles, and everyday utilitarian objects. These finds demonstrate the technological abilities and artisanal skills of the inhabitants.

Bone and Terracotta Objects

Terracotta figurines, toys, animal representations, and bone tools have also been discovered, reflecting aspects of daily life, artistic expression, and cultural practices.

The material culture of Rupnagar demonstrates that its inhabitants were engaged not only in agriculture and subsistence activities but also in craftsmanship, trade, and organized social systems. As such, the site occupies a crucial position in understanding cultural transformation and continuity from the Harappan period to later historical societies in South Asia.

Economy

Rupnagar Archaeological Site possessed a diversified economy primarily based on agriculture, animal husbandry, craft production, and trade. Its location near the Sutlej River provided fertile agricultural land, water resources, and convenient transportation routes, all of which contributed to economic stability and long-term settlement.

Archaeological evidence, including botanical remains and faunal materials, suggests that the inhabitants cultivated crops such as wheat, barley, and other agricultural products. Animal husbandry formed another important component of the local economy, involving the domestication of cattle, sheep, goats,

and other animals. Livestock were utilized not only for food but also for agricultural labor and transportation.

Craft production was also a significant economic activity at Rupnagar. Archaeological findings reveal evidence of bead-making, pottery production, metallurgy, and terracotta craftsmanship. Artifacts made from stone, faience, and metals indicate a high degree of technical skill and artistic ability. Similarities between material remains found at Rupnagar and other Harappan settlements further suggest that the site was connected to wider trade networks through which raw materials and finished goods circulated.

Social Life

The social life of Rupnagar appears to have been organized and community-oriented. Residential architecture, domestic materials, and burial customs suggest that family units formed the basic structure of society. The layout of houses indicates the possibility of extended or joint-family living arrangements, with multiple rooms serving domestic and storage purposes.

Evidence also points to a degree of occupational specialization within society. Some inhabitants were likely engaged in agriculture, while others specialized in pottery, metalworking, bead-making, trade, or other forms of craftsmanship. The diversity of tools and manufactured goods supports the existence of a structured division of labor.

Although clear evidence of rigid social hierarchy is limited, variations in burial goods suggest the possibility of differences in social or economic status. Some graves contained pottery, ornaments, and utilitarian items, indicating distinctions in wealth or social position among individuals.

Religious and Cultural Aspects

Direct evidence concerning religious beliefs at Rupnagar remains limited; however, archaeological materials provide important clues regarding spiritual and cultural practices. Burial customs indicate that the inhabitants may have held beliefs related to death and the afterlife. The placement of everyday objects and ornaments within

graves may suggest beliefs in continued existence or the practical needs of the deceased after death.

Terracotta figurines of humans and animals may have served symbolic, ritualistic, or cultural purposes. Similar to other Harappan settlements, it is possible that the people of Rupnagar practiced forms of belief associated with fertility, nature worship, or domestic religious traditions.

Culturally, Rupnagar represents an important site where different historical traditions intersect. The transition from Harappan culture to the Painted Grey Ware phase, the Northern Black Polished Ware culture, and later historical periods demonstrates both continuity and transformation across centuries.

Historical and Archaeological Significance of Rupnagar

The greatest importance of Rupnagar lies in its **remarkable cultural continuity**. It is one of the rare archaeological sites in South Asia where human occupation persisted after the decline of the Harappan Civilization.

Consequently, the site functions as a historical bridge linking the Indus Civilization with later cultural traditions of the Indian subcontinent.

Rupnagar is also important for understanding the geographical spread of the Indus Civilization, as it represents one of the northernmost areas of Harappan cultural expansion. Furthermore, the material remains recovered from the site contribute significantly to understanding broader social, economic, and political transformations in ancient South Asia.

From an archaeological perspective, Rupnagar demonstrates that the decline of the Harappan Civilization was not abrupt; rather, cultural adaptation and gradual transformation occurred in several regions. Therefore, Rupnagar remains a key site for understanding long-term historical continuity and civilizational development in the subcontinent.

Conclusion

Rupnagar is one of the significant archaeological sites associated with the

Indus Valley Civilization, distinguished by its long cultural continuity, strategic geographical location, and rich archaeological record. Situated on the bank of the Sutlej River, the settlement benefited from favorable conditions for agriculture, trade, and sustained habitation. Archaeological excavations reveal that occupation at the site continued from the Harappan period through later historical eras.

The study of Rupnagar contributes not only to understanding the northern extent of the Indus Civilization but also to reconstructing broader patterns of cultural transformation within South Asia. Material culture, settlement structures, burial customs, and evidence from successive cultural phases provide valuable insights into social organization, economic activities, and historical development. On this basis, Rupnagar occupies a central place in the study of the Indus Civilization and the ancient history of South Asia.

References

1. Sharma, Y. D. (1955). *Past pattern of an ancient Punjab town: Excavations at Ropar*. New Delhi, India: Archaeological Survey of India.

2. Kenoyer, J. M. (1998). *Ancient cities of the Indus Valley Civilization*. Karachi, Pakistan: Oxford University Press.

3. Possehl, G. L. (2002). *The Indus Civilization: A contemporary perspective*. Walnut Creek, CA: AltaMira Press.

4. Wheeler, R. E. M. (1968). *The Indus Civilization* (3rd ed.). Cambridge, UK: Cambridge University Press.

5. Marshall, J. (1931). *Mohenjo-daro and the Indus Civilization* (Vols. 1–3). London, UK: Arthur Probsthain.

6. Singh, U. (2008). *A history of ancient and early medieval India: From the Stone Age to the 12th*

century. New Delhi, India: Pearson Education.

7. Allchin, B., & Allchin, R. (1982). *The rise of civilization in India and Pakistan*. Cambridge, UK: Cambridge University Press.

8. Lal, B. B. (1997). *The earliest civilization of South Asia: Rise, maturity and decline*. New Delhi, India: Aryan Books International.

Sanyasi Buthi

Introduction

Sanyasi Buthi is an important archaeological site located near the western pass of the Kai Valley in Dadu District, Sindh, Pakistan. The site is of considerable significance because a natural water spring is situated nearby. In ancient times, such water sources would have played a crucial role in supporting human settlement and meeting the daily needs of the inhabitants. The availability of water was often a decisive factor in the establishment and sustainability of ancient communities.

Geographical and Environmental Context

Sanyasi Buthi is situated on an elevated hill, providing it with a natural advantage over the surrounding landscape. The selection of such a location suggests that the ancient inhabitants considered not only access to water but also strategic and defensive concerns. The Kai Valley and its surrounding mountain passes served as important routes of communication and movement between different regions in antiquity.

Archaeological Significance

According to the renowned archaeologist **Hugh Trevor Lambrick**, Sanyasi Buthi is associated with the urban phase of the Indus Civilization. This assessment indicates that the site was likely part of the extensive network of settlements that characterized the mature urban development of the Indus Valley Civilization. Although detailed excavation data from the site remain limited, its location and cultural attribution make it an important component of the archaeological landscape of Sindh.

Relationship with the Indus Civilization

The urban phase of the Indus Civilization is distinguished by organized settlements, sophisticated architecture, standardized craft production, and extensive trade networks. The location of Sanyasi Buthi on a prominent hill near a reliable water source suggests that it may have functioned as a well-planned settlement within this broader cultural system. Such sites often served not only as residential centers but also as nodes of economic, administrative, and communication activities.

Historical Importance

Sanyasi Buthi is one of the significant archaeological sites in the Dadu region and the foothills of the Kirthar Range that contributes to our understanding of the geographical extent of the Indus Civilization. The site demonstrates that the influence of the Indus urban tradition extended beyond major cities into valley and mountainous regions, reflecting the civilization’s broad cultural and economic reach.

Conclusion

Sanyasi Buthi is an important archaeological site associated with the urban phase of the Indus Civilization, located in the Kai Valley of Dadu District. The presence of a natural spring, its strategic position on an elevated hill, and the observations of Hugh Trevor Lambrick underscore its historical significance. Further archaeological excavation and scientific investigation could provide a deeper understanding of the site's chronology, function, and role within the wider framework of the Indus Civilization.

References

1. Lambrick, Hugh Trevor. (1964). *Sind: A General Introduction*. Jamshoro, Pakistan: Sindhi Adabi Board.

2. Lambrick, Hugh Trevor. (1967). *Ancient Sites in Sind*. Karachi:

Department of Archaeology, Government of Pakistan.

3. Majumdar, N. G. (1934). *Explorations in Sind*. Karachi: Government of Sindh.

4. Mughal, M. R. (1997). *Ancient Cholistan: Archaeology and Architecture*. Lahore: Ferozsons.

5. Wheeler, R. E. M. (1968). *The Indus Civilization* (3rd ed.). Cambridge, England: Cambridge University Press.

Sinauli

Introduction

Sinauli is an important archaeological site located in the Baghpat district of Uttar Pradesh, India, associated with the Chalcolithic (Copper Age) period of ancient northern India. The site has gained exceptional significance because excavations uncovered more than one hundred burials, martial weapons, copper artifacts, royal graves, and chariot-like vehicles, all of which have contributed to new scholarly discussions regarding the social, military, and cultural development of ancient India. Based on the discoveries made at Sinauli, many researchers consider it a crucial example of an advanced Bronze Age society in northern India.

The site is particularly significant because, during the 2018 excavations, three vehicles were discovered that many scholars identified as chariots, while others interpreted them as carts or ox-drawn vehicles. This debate has placed Sinauli at the center of

archaeological, historical, linguistic, and Indo-European studies.

The archaeological evidence from Sinauli suggests the existence of a socially stratified and technologically advanced society characterized by metallurgy, elaborate burial customs, and possibly organized military structures. The presence of weapons, ornaments, pottery, and specialized funerary goods in the graves further indicates distinctions in social status among the inhabitants.

Geographical Location

Sinauli is situated in Baraut Tehsil of Baghpat District, Uttar Pradesh, India. The site lies approximately at **29°14′46″ North latitude** and **77°21′03″ East longitude**. Geographically, it belongs to the fertile **Ganga–Yamuna Doab**, the alluvial plain situated between the Ganges and Yamuna rivers, a region historically favorable for human settlement and agricultural activities.

The landscape surrounding Sinauli consists primarily of flat and fertile

alluvial plains enriched by riverine deposits, making the area highly suitable for cultivation. Scholars suggest that in ancient times, nearby rivers and seasonal water systems provided an environmentally favorable setting for sustained settlement.

From an environmental perspective, Sinauli occupied a region where monsoonal rainfall and river systems supported agricultural production. Archaeological evidence indicates that the inhabitants were likely engaged in the cultivation of crops such as wheat and barley while also practicing animal husbandry.

Historical and Cultural Background

Sinauli is generally dated to approximately **2200 BCE–1800 BCE**, a period contemporary with the **Late Harappan Phase** of the Indus Valley Civilization and the **Ochre Coloured Pottery (OCP) culture** of northern India. This era is often regarded as a transitional period following the decline of the urban Harappan civilization and the emergence of regional cultural traditions across northern India.

The Ochre Coloured Pottery culture is distinguished by a characteristic type of pottery coated with a reddish or ochre slip. Pottery, copper objects, ornaments, and burial practices discovered at Sinauli demonstrate close associations with this cultural horizon, although several artifacts also exhibit similarities with Late Harappan traditions.

Historically, the site is important because it contributes to ongoing debates concerning the nature of cultural transformation in northern India after the decline of the Indus Valley Civilization. Some scholars interpret Sinauli as a continuation of Late Harappan traditions, whereas others consider it representative of an independent regional culture.

Discovery and Early Excavations

Sinauli was discovered accidentally in **2005**, when local farmers leveling agricultural land encountered human skeletal remains and fragments of ancient pottery. The discovery was reported to local authorities and subsequently attracted the attention of the **Archaeological Survey of India**

(ASI), which initiated archaeological investigations.

During the first systematic excavations conducted between **2005 and 2006**, archaeologists uncovered **more than 116 burials**, establishing Sinauli as one of the most important cemetery sites in northern India. These graves contained human skeletons along with pottery, copper weapons, beads, ornaments, and various funerary objects.

The excavations demonstrated that the burials were carefully arranged and often accompanied by grave goods, suggesting established funerary beliefs and evidence of social differentiation. Child burials were also identified, indicating a structured burial tradition within the society.

The initial excavations brought Sinauli into academic prominence, but the site gained international recognition after the **2018 excavations**, when chariot-like vehicles, elite burials, and copper weaponry were discovered. These major findings will be discussed in detail in the following section.

The 2018 Excavations and Major Discoveries

The 2018 excavations at Sinauli are regarded as a decisive turning point in the archaeological history of the site. Conducted by the **Archaeological Survey of India (ASI)**, these excavations initially aimed to further investigate the discoveries made during earlier explorations. However, the excavation soon revealed extraordinary findings that significantly reshaped scholarly discussions concerning the Bronze Age societies of South Asia.

During this phase, several burial units were systematically excavated, with **eight major burials** receiving detailed documentation. Combined with previous excavations, the total number of burials exceeded one hundred. Archaeologists employed stratigraphic excavation methods, carefully recording soil layers, burial patterns, and artifact positions to reconstruct the site's cultural context accurately.

Burials and Human Skeletal Remains

The burials discovered during the 2018 excavations can broadly be divided into two principal categories:

1. **Primary Burials** – burials in which the deceased individuals were interred in complete anatomical form.
2. **Secondary or Symbolic Burials** – burials lacking complete human remains but containing ritual or symbolic grave goods.

Several graves contained wooden coffins decorated with copper plating. Some of these coffins exhibited anthropomorphic motifs or ornamental designs, which are interpreted as indicators of elite social rank or ritual symbolism.

The skeletal remains were generally aligned in a **northwest–southeast orientation**, reflecting an organized funerary tradition. Child burials were also identified, offering important insights into the demographic structure and burial customs of the society.

Chariots and Vehicles

One of the most debated discoveries at Sinauli is the recovery of **three wooden vehicles**, which many scholars interpret as **chariots**.

These vehicles display the following notable features:

- A wooden structural framework
- Copper reinforcements on several components
- Large solid wheels (solid-disk wheels)
- Yoke and harness-like features
- Decorative copper triangular motifs

According to some archaeologists, these vehicles were intended for warfare and represent early war chariots. However, other scholars argue that they were heavy transport carts or ceremonial vehicles rather than true war chariots, particularly because they lacked **spoked wheels**, a defining feature of fast-moving chariots in many ancient civilizations.

The inclusion of these vehicles within elite burials strongly suggests that they belonged to individuals of elevated social or military status and may have

functioned as symbols of prestige and authority.

Weapons, Pottery, and Other Material Artifacts

The material culture discovered at Sinauli is both rich and diverse. Significant findings include:

Weapons:

- Copper antenna-hilted swords
- Daggers
- Spears
- Shields
- Copper helmets

Ornaments and Decorative Objects:

- Thousands of beads (including faience, agate, and carnelian varieties)
- Gold and copper bangles
- Decorative necklaces and garlands

Pottery and Ritual Objects:

- Handmade and wheel-made pottery vessels

- Ochre Coloured Pottery (OCP) ceramics
- Large and small ritual vessels placed inside graves

The careful arrangement of these objects within the burials suggests the existence of highly structured funerary customs and symbolic practices. Grave goods appear to have reflected both ritual beliefs and social hierarchy.

Scientific Analyses

Radiocarbon Dating

Radiocarbon dating conducted on wood, seeds, and associated organic remains from Sinauli indicates that the site dates approximately to **2200 BCE–1800 BCE**.

These chronological results strongly support the interpretation that Sinauli belongs to the early Bronze Age and was contemporaneous with the later phases of the Indus Valley Civilization.

Isotopic Studies

Stable isotope analyses of human remains revealed that:

- The diet relied primarily on **C3 crops**, including wheat and barley;
- Animal protein consumption was also present;
- Agriculture and pastoralism coexisted within the economic system.

These findings indicate a stable agrarian society adapted to the fertile riverine plains.

Material and Metallurgical Studies

Scientific examination of copper artifacts revealed the presence of **arsenic**, indicating sophisticated metallurgical techniques. The combined use of wood and copper in the construction of weapons and vehicles demonstrates considerable technological advancement.

Overall, the scientific evidence suggests that Sinauli was inhabited by a socially organized and technologically skilled population with developed craft traditions and complex funerary customs.

Archaeological and Cultural Significance

Sinauli has emerged as an archaeological site of exceptional importance for understanding Bronze Age societies in northern India. The site not only provides valuable information regarding funerary traditions, social stratification, and metallurgical development, but also demonstrates that a complex and organized society existed in northern India after the decline of the Indus Valley Civilization.

The discovery of elite burials, weapons, coffins, ornaments, and vehicles suggests the presence of social hierarchy, where certain individuals received elaborate funerary treatment distinct from ordinary burials. Such differentiation indicates the existence of ruling, warrior, or elite classes within the society.

The significance of Sinauli is further enhanced by the arrangement of grave goods, burial orientations, and symbolic objects, which provide insights into religious beliefs, ritual practices, and social organization. Consequently,

Sinauli is not merely a cemetery site but also an important source for understanding the ideological and ceremonial life of ancient communities.

Association with the Ochre Coloured Pottery (OCP) Culture

Sinauli is generally associated with the **Ochre Coloured Pottery (OCP) culture**, which flourished approximately between **2000 BCE and 1500 BCE** in the Ganga–Yamuna Doab region of northern India.

This culture is distinguished by pottery coated with an ochre or reddish slip, many examples of which have been recovered from Sinauli. The ceramics, funerary materials, and copper objects suggest that the region represented a locally developed and culturally sophisticated center.

Several scholars argue that the OCP culture maintained certain connections with the Late Harappan phase of the Indus Valley Civilization, whereas others interpret it as an autonomous regional tradition that evolved independently within northern India.

Connections with the Indus Valley Civilization

The relationship between Sinauli and the Indus Valley Civilization remains a subject of scholarly debate. Some archaeologists regard Sinauli as a continuation of **Late Harappan traditions** for several reasons:

- Certain pottery styles resemble Harappan ceramics;
- Metallurgical expertise in copper objects reflects technological similarities with Harappan traditions;
- Some funerary customs suggest limited cultural continuity.

On the other hand, many scholars argue that Sinauli cannot be viewed as a direct continuation of Harappan civilization because:

- There is little evidence of urban planning comparable to Harappan cities;
- Burial customs differ significantly from typical Harappan cemeteries;

- The vehicles and weaponry indicate distinctive regional developments.

Thus, Sinauli is often interpreted as a transitional cultural center that may represent interaction between Late Harappan traditions and emerging societies of the Gangetic plains.

Scholarly Debates and Controversies

The Aryan Migration Theory Debate

One of the most significant scholarly debates concerning Sinauli relates to the **Aryan Migration Theory (AMT)**. According to conventional interpretations, Indo-Aryan groups entered the Indian subcontinent around **1500 BCE**, introducing horse-drawn chariots, martial traditions, and elements associated with early Vedic culture.

However, the chronology of Sinauli and the discovery of chariot-like vehicles have led some scholars to argue that:

- Chariot-related technology may have already existed in northern India;
- Metallurgical and martial traditions could have developed locally;
- Certain elements of Vedic culture may have emerged through indigenous cultural evolution.

Nevertheless, many international scholars remain cautious regarding these interpretations. Critics argue that:

- The Sinauli vehicles may have been ceremonial carts or ox-drawn wagons rather than true war chariots;
- The absence of **spoked wheels** weakens the classification of these vehicles as military chariots;
- Direct evidence for horses remains limited.

Debates Regarding Burial Practices

Some researchers argue that Sinauli's funerary customs differ considerably from later Vedic traditions, where **cremation** became more common. By contrast, Sinauli presents extended

burials accompanied by wooden coffins and grave goods.

As a result, direct identification of Sinauli with Vedic society remains speculative and continues to be debated among scholars.

Historical Importance and Ongoing Research

The discoveries at Sinauli have compelled historians and archaeologists to reconsider older assumptions about northern India following the decline of the Indus Valley Civilization. Previously, many scholars assumed the existence of a cultural discontinuity or “dark phase” after the collapse of urban Harappan society. However, Sinauli suggests that:

- Advanced communities continued to exist;
- Metallurgical traditions and funerary complexity persisted;
- Social stratification and elite authority were already established.

Contemporary research includes **DNA analysis, isotopic studies, metallurgical sourcing, and**

geophysical surveys, all of which are expected to provide more precise information regarding the biological origins, mobility, economy, and technological development of the Sinauli population.

Conclusion

Sinauli represents one of the most significant archaeological discoveries for understanding Bronze Age northern India. The site provides fundamental evidence regarding social organization, burial customs, metallurgy, and possible vehicular technology. Elite burials, copper weapons, wooden coffins, and chariot-like vehicles collectively indicate the existence of a socially stratified and culturally sophisticated society.

The discoveries at Sinauli have not only elevated the importance of the Ochre Coloured Pottery culture but have also generated renewed discussions concerning the Indus Valley Civilization, Vedic culture, and Indo-European studies. Although many questions remain unresolved, Sinauli has become an essential reference point for future

archaeological and historical research in South Asia.

References

1. Anthony, D. W. (2007). *The Horse, the Wheel, and Language: How Bronze-Age Riders from the Eurasian Steppes Shaped the Modern World*. Princeton University Press.
2. Lal, B. B. (2002). *The Sarasvati Flows On: The Continuity of Indian Culture*. Aryan Books International.
3. Manjul, S. K. (2019). Sinauli excavations and burial practices in the upper Ganga-Yamuna Doab. *Puratattva, 49*, 1–20.
4. Parpola, A. (2015). *The Roots of Hinduism: The Early Aryans and the Indus Civilization*. Oxford University Press.
5. Possehl, G. L. (2002). *The Indus Civilization: A Contemporary Perspective*. AltaMira Press.
6. Sharma, D. V., Nauriyal, K. C., & Prabhakar, V. N. (2007). Excavations at Sinauli: A Late Harappan necropolis

in the Upper Ganga-Yamuna Doab. *Puratattva, 37*, 15–30.
7. Singh, U. (2008). *A History of Ancient and Early Medieval India: From the Stone Age to the 12th Century*. Pearson Education.
8. Witzel, M. (2001). Autochthonous Aryans? The evidence from Old Indian and Iranian texts. *Electronic Journal of Vedic Studies, 7*(3), 1–115.

Shah Jo Kotro

The ancient archaeological site of Shah Jo Kotro is located in Dadu District, approximately 7 kilometers southeast of Khajoor, on the eastern left bank of the Baran stream. Geographically, the site occupies an important location, as a spring emerging from the Hothiyano Mountain flows near the settlement. The availability of such a water source suggests that the area provided favorable conditions for ancient human

habitation, agriculture, and daily subsistence activities.

Architectural remains visible on the surface of the site include traces of walls, indicating the existence of an organized settlement or residential structures. Pottery discovered from this site closely resembles ceramic types unearthed at the ancient sites of Kili and Mehi in southern Balochistan, suggesting possible cultural interaction or trade connections between Shah Jo Kotro and these regions.

Of particular significance are the motifs depicted on the pottery recovered from the site. Designs featuring date palm trees and goats have been identified, offering valuable insight into the socio-economic life of the inhabitants. The depiction of goats indicates that the local population was likely engaged in pastoral activities, especially goat herding, while the representation of date palms suggests that date cultivation was practiced in Sindh during that period. Such iconographic evidence provides important clues regarding subsistence practices, economy, and

environmental conditions in ancient societies.

Shah Jo Kotro is therefore regarded as an important archaeological site for understanding ancient cultural interactions between Sindh and Balochistan, agricultural traditions, and patterns of early human settlement. The site also contributes to broader discussions concerning cultural continuity before and during the Indus Valley Civilization.

References

1. Majumdar, N. G. (1934). *Explorations in Sind*. Government of India Press.
2. Possehl, Gregory L. (2002). *The Indus Civilization: A Contemporary Perspective*. AltaMira Press.

3. Kenoyer, Jonathan Mark (1998). *Ancient Cities of the Indus Valley Civilization*. Oxford University Press.
4. Fairservis, Walter A. (1975). *The Roots of Ancient India: The Archaeology of Early Indian Civilization*. University of Chicago Press.

Sari Khola

Introduction

Sari Khola is an important archaeological site located in present-day **Khyber Pakhtunkhwa** along the route connecting **Peshawar** and **Rawalpindi**. The site was discovered by archaeologists in late 1967, and systematic excavations were carried out in May 1968. Sari Khola has gained considerable significance because it preserves a long sequence of human occupation represented by four distinct cultural layers, providing valuable evidence for the prehistoric development of northern Pakistan.

Discovery and Excavation

The archaeological importance of Sari Khola was recognized in 1967 when researchers identified the site during field surveys. Subsequent excavations revealed a stratified settlement containing four superimposed occupational layers, each representing a different phase of cultural development. This sequence offers a rare opportunity to study the transition from the Late Stone Age to more advanced settled communities in the region.

Stratigraphic Sequence

The Earliest Occupation: Late Stone Age

The lowest and earliest layer of Sari Khola belongs to the Late Stone Age. Excavations from this level yielded stone tools that indicate the presence of an early human community dependent on stone technology. These findings provide evidence of prehistoric occupation before the emergence of pottery-producing agricultural societies.

The Second Layer: Rural Culture and Kot Diji Affinities

Above the earliest occupation lies a layer associated with the rural cultural traditions that preceded urban civilization in the Indus region. The material remains recovered from this level closely resemble those found at sites belonging to the **Kot Diji Culture**. Such similarities suggest cultural connections between northern Pakistan and the wider Early Harappan cultural sphere.

The Third Layer: The Cemetery Phase

The third occupational layer is particularly significant because it contains the remains of an ancient cemetery. This burial ground is regarded as one of the earliest known cemeteries of its kind in South Asia. The cemetery provides valuable information regarding mortuary practices, social organization, and population history during the prehistoric period.

The Fourth Layer: Advanced Settlement

The uppermost layer represents a more developed settlement phase. Architectural remains indicate the use of stone in construction, reflecting advances in building techniques. Excavations also yielded terracotta figurines and pottery vessels, both of which demonstrate increasing cultural sophistication and craft specialization.

The Cemetery of Sari Khola

The cemetery discovered in the third layer is among the most important features of the site. The graves were arranged in straight rows running from east to west. The deceased were buried

in an extended position, with their heads placed toward the east and their feet toward the west.

An additional notable feature is the apparent separation of male and female burials into different rows. Unlike many contemporary cemeteries of South Asia, the graves at Sari Khola contained few or no grave goods. The absence of accompanying artifacts distinguishes this cemetery from many other prehistoric burial sites where personal belongings commonly accompanied the dead.

The skeletal remains of men, women, and children recovered from the cemetery offer significant opportunities for anthropological and bioarchaeological research. Detailed analysis of these remains may contribute to a better understanding of the biological ancestry, health conditions, and demographic characteristics of the region's ancient inhabitants.

Relationship with the Indus Cultural Tradition

Although Sari Khola predates the mature urban phase of the **Indus Valley Civilization**, the evidence from its second occupational layer demonstrates strong connections with the rural cultures that eventually contributed to the emergence of the Indus Civilization. The site's cultural sequence illustrates the gradual evolution from prehistoric stone-tool-using communities to more organized agricultural settlements.

Conclusion

Sari Khola is one of the most significant prehistoric archaeological sites in Pakistan. Its four cultural layers document a long sequence of human occupation, ranging from the Late Stone Age to more advanced settled communities. Particularly important is the cemetery discovered in the third layer, which provides unique evidence regarding burial customs and population history in prehistoric South Asia. Continued archaeological and bioanthropological research at Sari Khola has the potential to enhance our understanding of the cultural and biological development of early societies in the northwestern subcontinent.

References

1. Allchin, B., & Allchin, R. (1982). *The Rise of Civilization in India and Pakistan*. Cambridge University Press.

2. Dani, A. H. (1967). *The Prehistory of Eastern Pakistan*. University of Dacca Press.

3. Kenoyer, J. M. (1998). *Ancient Cities of the Indus Valley Civilization*. Oxford University Press.

4. Possehl, G. L. (2002). *The Indus Civilization: A Contemporary Perspective*. AltaMira Press.

5. Siddiqui, F. A. (n.d.). *Sindh Ji Qadeem Tahzeeb*. Institute of Sindhology.

Sheri Khan Tarakai

Introduction

Sheri Khan Tarakai is one of the significant archaeological sites of early

agrarian settlements in South Asia, located in the present-day Bannu District. The site remained occupied approximately from 5000 BCE to 2500 BCE, making it highly important for understanding the transition from the Neolithic to the Chalcolithic periods. Archaeological investigations indicate that Sheri Khan Tarakai was among the earliest farming and village communities in South Asia, where human society was gradually moving toward permanent settlement, organized agriculture, animal domestication, and craft specialization.

The site is particularly important because it provides insight into the continuity of early agricultural life in northwestern Pakistan and contributes significantly to understanding the early social and economic foundations of the Indus Valley Civilization. According to archaeological research, Sheri Khan Tarakai has been recognized as the second oldest village farming settlement in South Asia, reflecting its exceptional historical and archaeological significance.

Geographical Location

Sheri Khan Tarakai is located approximately 17 kilometers southwest of Bannu City. The site forms part of the **Bannu Basin**, a geographical region bordered by the hills of Waziristan and Afghanistan to the west and the floodplains of the Indus River to the east. Due to this strategic geographical setting, the region has historically been suitable for human settlement, agriculture, and economic exchange.

The environmental landscape of the Bannu Basin consists of seasonal watercourses, fertile soils, and a semi-arid climate, all of which provided favorable conditions for early agricultural communities. Scholars suggest that the inhabitants of Sheri Khan Tarakai utilized seasonal runoff flowing from the hills of Waziristan to practice an early form of **flood-water farming**, an adaptive agricultural strategy suited to dry environments.

Discovery and Excavations

The site of Sheri Khan Tarakai was discovered in 1985 by members of the **Bannu Archaeological Project**. Following its discovery, systematic

excavations were conducted over five field seasons between 1986 and 1990. Archaeological findings revealed that the settlement was a relatively small village, inhabited at any one time by perhaps a few hundred individuals.

Excavations uncovered mud-walled houses, some with stone foundations, while roofs were constructed using a **wattle-and-daub** technique involving wood, reeds, and mud. Evidence suggests that the entire settlement was not occupied simultaneously, but rather different parts of the site were inhabited during different periods.

Archaeologists also recovered pottery vessels, stone tools, bone artifacts, grinding stones, and terracotta human figurines, all of which provide valuable insight into the social, economic, and symbolic life of the settlement’s inhabitants.

The Bannu Archaeological Project

The study of Sheri Khan Tarakai was primarily undertaken through the **Bannu Archaeological Project**, a collaborative research initiative

involving Pakistani and international academic institutions. The project included participation from organizations such as The British Museum, University College London, and University of Cambridge.

Between 1985 and 2001, the project conducted extensive archaeological surveys and excavations throughout the Bannu region, leading to the discovery and investigation of numerous prehistoric and early historic sites. As a result, researchers established the importance of Sheri Khan Tarakai in understanding the early development of village societies in northwestern South Asia.

Archaeological and Historical Significance

The significance of Sheri Khan Tarakai extends far beyond its identity as an ancient village settlement. It serves as an important source for understanding the origins of agriculture, residential organization, craft production, food strategies, and social development in prehistoric societies.

The site is also essential for studying the origins of the Indus Valley Civilization, as it represents one of the early communities that laid the socio-economic foundations for later urban development. Its chronology overlaps with several important contemporary sites, including Mehrgarh, Kili Gul Mohammad, and Rehman Dheri. Some scholars further suggest that the earliest occupation at Sheri Khan Tarakai may slightly predate the Ravi Phase of Harappa.

Thus, Sheri Khan Tarakai occupies a central position in understanding not only the ancient history of the Bannu region but also the broader emergence of agricultural societies and early civilization in South Asia.

Settlement Pattern and Residential Organization

Sheri Khan Tarakai appears to have been a relatively small yet organized village settlement. Archaeological excavations suggest that only a few hundred people may have inhabited the site at any given time. Evidence further indicates that the entire settlement was

not occupied simultaneously; instead, habitation shifted from one section of the site to another over different periods. Such movement may have been influenced by environmental changes, economic needs, or patterns of social organization.

The settlement pattern demonstrates a communal way of life in which domestic activities and craft production were closely integrated. The discovery of storage facilities suggests that the inhabitants practiced planned food preservation and maintained permanent or semi-permanent residence. This level of organization reflects an important stage in the socio-economic development of early agricultural communities in northwestern South Asia.

Architectural Characteristics

Archaeological investigations reveal that the houses at Sheri Khan Tarakai were primarily constructed from mud walls, while some structures possessed stone foundations. Roofs were likely built using the **wattle-and-daub** technique, which involved wooden poles, branches,

reeds, and mud plaster. This architectural method illustrates the inhabitants' efficient use of locally available resources and their adaptation to the surrounding environment.

The structural remains suggest that the settlement was not merely seasonal but was likely occupied throughout much of the year. Storage facilities found at the site further imply long-term habitation. Nevertheless, some evidence also indicates that a portion of the population may have practiced **transhumant pastoralism**, involving seasonal movement with domesticated animals between different ecological zones.

Material Culture: Pottery and Artistic Traditions

Among the most important archaeological discoveries at Sheri Khan Tarakai is its rich assemblage of pottery. Excavations revealed a variety of utilitarian ceramic vessels used for cooking, storage, and everyday domestic purposes. Many of these vessels were decorated with geometric and figurative motifs, reflecting both

artistic creativity and symbolic expression within the community.

The pottery was likely manufactured from locally available raw materials obtained near the settlement. Archaeological evidence suggests that pottery production and firing took place within the site itself, indicating that ceramic manufacture constituted an important aspect of local economic activity.

Excavations also yielded a considerable number of **terracotta human figurines**, which provide insight into the symbolic, cultural, and possibly ritual dimensions of village life. The diversity of decorative motifs found on ceramics and figurines suggests that the inhabitants possessed a vibrant iconographic tradition that enriched their social and cultural environment.

Stone Tools and Craft Production

A substantial quantity of **lithic artefacts** (stone tools) was recovered from Sheri Khan Tarakai. Most of these tools appear to have been produced using locally sourced stone materials.

They were likely employed in cutting, grinding, agricultural work, and various domestic tasks.

Evidence of manufacturing debris indicates that several forms of craft production were practiced at the site, including:

- Pottery production and firing
- Bone-working industries
- Lithic flaking and stone tool production
- Stone grinding for grain processing
- Bead drilling and ornament manufacture

These findings demonstrate that Sheri Khan Tarakai was not solely an agricultural settlement but also a center of local craftsmanship and specialized production activities.

Economy and Agricultural Practices

The economy of Sheri Khan Tarakai was based primarily on agriculture, livestock management, and hunting. Archaeobotanical evidence indicates that the inhabitants cultivated **barley**

and **wheat**, which formed the foundation of their subsistence system.

Excavations uncovered grinding stones, grain-processing tools, chaff remains, and rachis internodes, suggesting that several stages of crop processing—including threshing, cleaning, grinding, and storage—were conducted within the settlement.

Given the geographical setting of the Bannu Basin, scholars propose that the inhabitants practiced **flood-water farming**, utilizing runoff water from seasonal streams descending from the hills of Waziristan. This adaptive strategy would have enabled successful agriculture in a semi-arid environment.

Animal Husbandry and Hunting

The inhabitants of Sheri Khan Tarakai domesticated sheep, goats, and cattle, which likely served as sources of meat, milk, wool, and labor. Zooarchaeological studies indicate that many domestic animals survived into adulthood, implying that they were valued not only for meat consumption but also for

secondary products such as dairy and fiber.

In addition to animal husbandry, hunting played a significant role in subsistence. Evidence suggests that villagers hunted a wide range of wild animals and gathered wild plant species and wood resources from the surrounding environment. Such practices demonstrate a diversified economic strategy that combined agriculture, herding, hunting, and resource collection.

Overall, the economy of Sheri Khan Tarakai reflects a mixed agro-pastoral system and provides crucial evidence for understanding the development of early farming communities in prehistoric South Asia.

Social and Cultural Life

Although no written records survive from the inhabitants of Sheri Khan Tarakai, archaeological evidence provides valuable insights into their social organization, beliefs, and daily life. Terracotta human figurines, decorated pottery, and crafted objects

suggest that the inhabitants possessed a developed symbolic and cultural tradition.

The geometric designs and figurative motifs painted on pottery may have held social, ritualistic, or symbolic meanings. In many early agrarian societies, such imagery often reflected collective identity, agricultural practices, or spiritual beliefs. The discovery of terracotta figurines—particularly female representations—has led some scholars to associate them with concepts of fertility or ritual symbolism, although such interpretations should be approached cautiously in archaeological scholarship.

The presence of organized residential structures and storage facilities suggests a degree of social cooperation, resource management, and collective economic activity. These features indicate the emergence of early forms of village organization and structured communal life.

Comparative Analysis with Contemporary Sites

Sheri Khan Tarakai was contemporaneous with several important early village settlements across northwestern South Asia. Particularly significant parallels can be observed with sites such as Mehrgarh, Kili Gul Mohammad, Rana Ghundai, and Rehman Dheri.

In terms of ceramic fabrics, vessel forms, decorative styles, and surface treatment, Sheri Khan Tarakai exhibits close similarities with the **Togau Phase** of northern Balochistan, which is also represented in the third period of Mehrgarh and the third phase of Kili Gul Mohammad. These similarities suggest the existence of regional cultural interaction, technological exchange, and perhaps limited trade networks among early settlements.

Some researchers argue that the earliest occupation of Sheri Khan Tarakai may slightly predate the Ravi Phase of Harappa. If this interpretation is correct, Sheri Khan Tarakai becomes even more significant in understanding the developmental foundations of the Indus Valley Civilization.

Connections with the Bannu Basin and Neighboring Settlements

Sheri Khan Tarakai did not exist in isolation but formed part of a broader cultural network within the Bannu Basin. Archaeological evidence from nearby sites such as Lewan, Tarakai Qila, and Islam Chowki demonstrates similar patterns of pottery production, bead-making, and craft specialization, suggesting economic and cultural connections among settlements.

Likewise, the large early historic site of Akra, occupied from approximately 2000 BCE onward, indicates that the Bannu region continued to develop as an important center of settlement and regional interaction across multiple historical periods.

Archaeological Importance and Role in the Indus Tradition

The archaeological significance of Sheri Khan Tarakai lies in its contribution to understanding the rise of early farming communities in South Asia. The site demonstrates how human populations during the fifth and fourth millennia BCE

increasingly depended on agriculture, animal husbandry, storage systems, and specialized craft production.

Sheri Khan Tarakai is particularly important for understanding the formative stages of the Indus Valley Civilization because it contains many of the foundational characteristics that later became highly developed in urban centers such as Mohenjo-daro and Harappa. Permanent settlement, food storage, organized agriculture, craft specialization, and symbolic artistic traditions are all visible at this early village site.

Furthermore, the relatively conservative material culture of Sheri Khan Tarakai and other Bannu Basin settlements suggests cultural continuity and gradual technological development rather than abrupt transformation during much of the fourth millennium BCE.

Conclusion

Sheri Khan Tarakai represents one of the most significant prehistoric village settlements for understanding the ancient history of the Bannu region and

the emergence of early agricultural societies in South Asia. Archaeological evidence demonstrates that by approximately 5000 BCE, its inhabitants had already established organized settlement systems based on agriculture, livestock management, local craft production, and resource planning.

The site not only sheds light on the socio-economic development of the Bannu Basin but also contributes significantly to understanding the broader origins of the Indus Valley Civilization. Its material culture, agricultural practices, architectural remains, and social organization reveal a gradual transition toward increasingly complex forms of human society, culminating in the urban achievements of the Indus Civilization.

References

- Allchin, B., & Allchin, R. (1997). *Origins of a Civilization: The*

Prehistory and Early Archaeology of South Asia. New Delhi: Viking.

- Coningham, R., & Young, R. (2015). *The Archaeology of South Asia: From the Indus to Asoka, c. 6500 BCE–200 CE*. Cambridge University Press.
- Kenoyer, J. M. (1998). *Ancient Cities of the Indus Valley Civilization*. Oxford University Press.
- Possehl, G. L. (2002). *The Indus Civilization: A Contemporary Perspective*. AltaMira Press.
- Thomas, K. D., Cartwright, C., & Morris, J. (1997). “The Environmental and Economic Context of Sheri Khan Tarakai.” In *South Asian Archaeology*. Cambridge University Press.
- Thomas, K. D., & Morris, J. (2002). *Excavations at Sheri Khan Tarakai and Early Village Life in the Bannu Basin*. London.
- Wheeler, R. E. M. (1968). *The Indus Civilization* (3rd ed.). Cambridge University Press.

Shikarpur

Introduction

Shikarpur is a village located in Bhachau Taluka of Kutch District in the state of Gujarat, India. Near this village, an important archaeological site associated with the Indus Valley Civilization, also known as the Harappan Civilization, has been discovered. This site is significant not only for understanding the geographical expansion of the Harappan Civilization but also for providing valuable information regarding the industrial activities, social organization, economic system, and cultural interactions of that era. Archaeological evidence suggests that Shikarpur functioned as a settlement where craftsmanship, tool production, and the

manufacture of various objects were practiced on a considerable scale.

The Indus Valley Civilization is regarded as one of the world’s earliest urban civilizations, flourishing approximately between 3300 BCE and 1300 BCE across a vast region of South Asia. Major centers of this civilization, such as Mohenjo-daro, Harappa, Dholavira, Lothal, and Rakhigarhi are widely recognized; however, smaller yet important sites like Shikarpur are equally crucial for understanding the regional diversity and economic framework of the Harappan world. In particular, the Kutch region historically held strategic importance due to its proximity to maritime and overland trade routes, suggesting that settlements such as Shikarpur may have played an essential role in the trade and industrial networks of the Harappan Civilization.

Geographical Location and Identification of the Archaeological Site

Shikarpur village is situated in Bhachau Taluka, Kutch District, Gujarat, India.

The actual archaeological site lies approximately 4.5 kilometers south of the village at a place called Valmio Timbo. The settlement covers an area of approximately 3.4 hectares and is considered a medium-sized Harappan settlement. Archaeological findings indicate that the principal activity at the site was the manufacture of various artifacts and engagement in specialized craftsmanship.

The geographical significance of Shikarpur becomes evident when considering Kutch’s historical connectivity with Sindh, Saurashtra, and the Arabian Sea through major trade routes. Therefore, Shikarpur may not have served merely as a local settlement but also as an important center of production and trade. The discovery of semi-precious stones, shell ornaments, terracotta objects, and metal artifacts further suggests that the inhabitants maintained economic relations with neighboring and distant regions.

Historical Background

The village of Shikarpur itself also possesses historical significance. A fort was constructed there during the nineteenth century CE. Within the fort are the tombs of three Muslim saints: Patha, Gebansha Multani, and Asaba. According to local traditions, Patha was believed to have migrated from Sindh and became renowned for transforming saline water into fresh water. Gebansha Multani is remembered for allegedly continuing to fight after decapitation, while Asaba is associated with curing blindness. Although these traditions belong largely to local folklore, they nonetheless reflect the cultural identity and religious heritage of the region.

However, the primary scholarly significance of Shikarpur lies in its Harappan archaeological remains, which provide evidence of human settlement dating back several thousand years. The site demonstrates that the Kutch region was deeply integrated into the broader cultural and economic system of the Indus Valley Civilization.

Discovery and Excavation History

Systematic excavations at the archaeological site of Shikarpur were conducted by the Gujarat State Archaeology Department between 1987 and 1989. These excavations revealed a cultural deposit exceeding three meters in thickness, indicating a long sequence of human occupation. The lower layers represented the Early Harappan period, whereas the upper layers belonged to the Mature Harappan phase. Consequently, Shikarpur is recognized as a site where different stages of Harappan cultural development can be observed in continuity.

Subsequently, more extensive excavations were carried out during 2007–2008 by The Maharaja Sayajirao University of Baroda. These investigations uncovered significant artifacts and generated important new insights regarding the settlement. As a result, Shikarpur has emerged as one of the important Harappan centers of the Kutch region, particularly highlighting its industrial and economic importance.

Cultural Phases: Early and Mature Harappan Periods

Archaeological evidence recovered from Shikarpur demonstrates that the site was an important settlement associated with the developmental stages of the Indus Valley Civilization. Excavations conducted between 1987 and 1989 revealed a cultural deposit exceeding three meters in thickness, indicating a prolonged sequence of occupation. Based on the archaeological findings, researchers have classified the site into two major cultural phases: the **Early Harappan Phase** and the **Mature Harappan Phase**.

During the Early Harappan period, the settlement appears to have possessed a relatively simple social and material structure, characterized by the emergence of early craft traditions. Pottery production, the manufacture of stone and bone tools, and the creation of objects for daily use were common practices during this phase. Although pottery designs were comparatively simple, early forms of decorative motifs and painted patterns were already present.

In the Mature Harappan period, Shikarpur developed into a more

organized and economically advanced settlement. Craft production expanded considerably, especially in the manufacture of objects made from semi-precious stones, terracotta, shells, and metals. Such developments suggest that Shikarpur functioned not merely as a residential settlement but also as a center of production and economic activity within the Harappan world.

Industrial Activities and Structural Features

Archaeological findings suggest that craftsmanship and artifact production constituted major economic activities at Shikarpur. The site yielded a variety of objects indicative of specialized labor and technical expertise. Terracotta toys, ornaments, metal implements, and seals demonstrate the advanced skills of local artisans.

Although Shikarpur lacks monumental architecture comparable to major urban centers such as Mohenjo-daro or Dholavira, the remains discovered at the site indicate the presence of organized residential and industrial spaces. The settlement pattern suggests that

separate areas may have existed for habitation, production, and storage purposes.

Material Culture and Archaeological Artifacts

The artifacts discovered at Shikarpur provide valuable insights into the material culture of the Harappan Civilization. Excavations uncovered ornaments, tools, toys, seals, pottery, and animal figurines, all of which contribute to an understanding of the settlement’s social and economic life.

Ornaments and Decorative Objects

Among the discoveries were ornaments crafted from semi-precious stones, steatite, and terracotta. These included beads, necklaces, decorative fragments, and different varieties of bangles. Bangles made from shells and terracotta indicate that personal adornment played an important role in the daily lives of the inhabitants. Additionally, microscopic gold beads were discovered, suggesting refined craftsmanship and possibly indicating distinctions in social status.

Metal and Bone Tools

Shikarpur yielded copper chisels, knives, arrowheads, rings, and other tools that reflect technological advancement. Bone tools, including pecker points and trimmers, were also found and may have been used for working wood, leather, or other materials.

Of particular significance was the discovery of blades made from Rohri chert, a stone material associated with the Rohri Hills region of Sindh, Pakistan. This finding strongly suggests trade and cultural interaction between Shikarpur and other Harappan centers, especially regions within Sindh.

Terracotta Objects and Toys

A substantial number of terracotta toys were uncovered at Shikarpur, including toy cart frames, wheels, animal figurines, and bull sculptures. These objects may have served not only as children’s playthings but also as representations of transportation systems and aspects of daily life.

One of the most remarkable discoveries was a terracotta representation of a human torso. The figure was carefully fired and preserved, although its head, arms, and lower body were broken. This artifact is significant because it may reflect artistic traditions, symbolic representation, or even religious beliefs among the inhabitants.

Pottery

A large quantity of pottery was recovered from the site, displaying painted motifs, engraved designs, and decorative patterns. These included bowls, dishes-on-stand, miniature pots, and storage vessels. The quality and artistic style of the pottery indicate that the inhabitants of Shikarpur valued both functionality and aesthetic expression in their material culture.

Seals and Inscriptions

Two important terracotta sealings with inscriptions were also discovered at Shikarpur, providing valuable evidence concerning Harappan administration and trade practices. One sealing depicts a

three-headed unicorn, a unique motif within Harappan iconography.

The second sealing bears three consecutive stamp impressions of Harappan seals. These impressions were made in such a manner that the inscribed upper portions of all three seals remain clearly visible. The reverse side of the sealing contains impressions of thread and knots, suggesting that these sealings may have been used to secure goods or packages for trade and administrative purposes.

The discovery of these sealings highlights Shikarpur’s role in trade, administration, and economic organization, since seals were commonly employed throughout the Harappan world for identifying ownership, regulating exchange, and controlling goods.

Subsistence Patterns and Economic Life

Archaeological evidence recovered from Shikarpur suggests that its inhabitants relied upon a mixed economic system consisting of animal husbandry, hunting,

limited agricultural activities, craftsmanship, and trade. The abundance of craft-related artifacts discovered at the site strongly indicates that Shikarpur functioned not merely as a residential settlement but also as an important center of production and distribution.

The discovery of semi-precious stone beads, shell ornaments, copper implements, Rohri chert blades, and seals indicates that the inhabitants participated in a wider economic network extending across different Harappan regions. The presence of Rohri chert is particularly significant because this material originated from the Rohri Hills region of Sindh, Pakistan, and was not locally available in Kutch. This finding suggests active trade and exchange networks between Shikarpur and other major Harappan settlements. Consequently, Shikarpur may have served as an important link connecting Kutch, Sindh, and other Harappan regions through systems of exchange and commerce.

Faunal Analysis and Food Habits

One of the most important categories of archaeological evidence recovered from Shikarpur consists of animal bone remains, which provide valuable insights into the dietary practices and economic life of the Harappans. Excavations yielded approximately **15,483 bone fragments**, which were studied at the Archaeology Laboratory of the Deccan College Post-Graduate and Research Institute.

According to zooarchaeological studies, approximately **53.46 percent of the bones were successfully identified**, representing **47 species**. These included **23 mammalian species**, **three bird species**, **five fish species**, and **thirteen molluscan species**. Among mammals, cattle remains were the most numerous, while remains of wild buffalo, nilgai, blackbuck, deer, wild pig, hare, and rhinoceros were also identified.

The analysis further demonstrated that approximately **85 percent of the faunal assemblage belonged to domesticated animals**, both during the Early and Mature Harappan phases. This finding highlights the central

importance of animal husbandry within the local economy. Simultaneously, the presence of wild animal remains indicates that hunting supplemented dietary requirements and economic practices.

A particularly noteworthy discovery was the presence of horse bones, which appeared only in the Mature Harappan levels. Although the interpretation of these remains remains debated among scholars, their occurrence raises important questions regarding animal domestication, mobility, and external interactions during the Harappan period.

Social and Cultural Life

The material culture of Shikarpur suggests a socially organized community in which craftsmanship, artistic expression, and daily utility occupied important roles. The presence of ornaments, toys, figurines, seals, and finely decorated pottery indicates that the inhabitants valued both practical needs and aesthetic expression.

Terracotta toy carts and wheels suggest the use of wheeled transport for

carrying goods and facilitating movement. Likewise, the discovery of seals implies the existence of organized systems of administration, ownership, and commercial regulation. These findings collectively portray Shikarpur as a settlement integrated into broader regional economic and cultural networks.

Furthermore, the diversity of artifacts reflects the presence of skilled artisans and specialized labor, indicating a degree of social organization and economic complexity within the settlement. Such evidence contributes significantly to our understanding of everyday life in regional Harappan communities.

Archaeological Importance of Shikarpur

The archaeological significance of Shikarpur lies in its contribution to understanding the regional diversity of the Indus Valley Civilization. The site is particularly important because it preserves evidence from both the Early and Mature Harappan periods, thereby

illustrating continuity and cultural transformation over time.

In addition, the wide range of artifacts, seals, Rohri chert blades, metal tools, and extensive faunal remains identifies Shikarpur as an important industrial and economic center within the Harappan world. Evidence of trade connections with Sindh and other regions further strengthens its significance as a node in wider exchange systems.

From an archaeological perspective, Shikarpur provides important evidence concerning regional settlement organization, technological development, trade practices, and subsistence strategies. Therefore, the site contributes substantially to reconstructing the broader historical landscape of the Harappan Civilization.

Conclusion

Shikarpur, Gujarat, represents an important and multidimensional archaeological settlement of the Indus Valley Civilization. Archaeological evidence demonstrates that the site remained occupied during both the Early

and Mature Harappan phases and developed as a center characterized by craftsmanship, trade, animal husbandry, and social organization.

The diversity of artifacts, discovery of seals, Rohri chert blades, and detailed faunal analysis collectively indicate that Shikarpur occupied an important position within the economic and cultural networks of the Harappan Civilization. On this basis, it may be argued that regional sites such as Shikarpur are equally significant as major urban centers like Mohenjo-daro and Harappa, since they provide critical insights into daily life, production systems, and interregional connections within the Harappan world.

References

1. Archaeological Survey of India. (2002). *Indian Archaeology: A Review*. New Delhi: Government of India.
2. R. S. Bisht. (2015). *Harappan Civilization: Excavations and Discoveries*. New Delhi: Archaeological Survey Publications.

3. S. R. Rao. (1985). *Lothal and the Indus Civilization*. New Delhi: Asia Publishing House.
4. Gregory L. Possehl. (2002). *The Indus Civilization: A Contemporary Perspective*. Walnut Creek, California: AltaMira Press.
5. Jonathan Mark Kenoyer. (1998). *Ancient Cities of the Indus Valley Civilization*. Karachi: Oxford University Press.
6. Deccan College Post-Graduate and Research Institute. (2010). *Zooarchaeological Studies of Harappan Sites*. Pune: Deccan College Publications.
7. Gujarat State Department of Archaeology. (1989). *Excavation Report of Shikarpur (Kutch)*. Gandhinagar: Government of Gujarat.

Shortughai

Shortughai (Shortughai), an ancient site located in today's Takhar Province of Afghanistan on the banks of the Amu Darya (Oxus River), is recognized as the northernmost known settlement of the Indus Valley Civilization. This settlement was established around 2500 BCE, with its primary purpose being the management of trade in lapis lazuli from Badakhshan. The existence of Shortughai demonstrates that the Indus Civilization was not confined to present-day Pakistan and India, but its trade networks extended deep into Central Asia.

Geographic Location and Importance

- Shortughai is situated in Takhar Province on the banks of the Amu Darya.
- Its proximity to the lapis lazuli mines of Badakhshan made it a highly strategic trading hub.
- It is considered the northernmost authentic site of the Indus Civilization.

Trade and Economy

- **Lapis Lazuli:** The primary purpose of Shortughai was to obtain lapis lazuli from Badakhshan and transport it to the cities of the Indus Civilization, and eventually to Mesopotamia.
- **Other Trade Links:** Archaeological evidence suggests connections with tin, camel trade, and other Afghan valuables.
- Despite the absence of coinage and the undeciphered Indus script, Shortughai functioned as a well-organized trading center.

Archaeological Discoveries

- **Pottery and Vessels:** Painted pottery, jars, beakers, and other vessels in the Harappan style were found.
- **Jewelry and Tools:** Carnelian and lapis beads, bronze tools, gold pieces, shell bangles, and terracotta figurines.

- **Seals:** Square seals with animal motifs, including one with a rhinoceros, directly linking the site to the Indus Civilization.
- **Models:** Clay models of cattle and carts, reflecting the agricultural life of the Indus people.
- **Brick Measurements:** Bricks conforming to Harappan standards, proving cultural continuity.

Agriculture and Irrigation

- Shortughai lies in a semi-arid region, so agriculture depended on irrigation.
- Excavations revealed traces of ancient canals, highlighting the agricultural strategies of the Indus people.

Significance

Shortughai proves that the Indus Civilization was an **international trading culture**, with networks stretching into Central Asia, Iran, and

Mesopotamia. This settlement stands as living evidence of the commercial acumen, cultural continuity, and global connections of the Indus people.

References

- Allchin, F. R., & Allchin, B. (1982). *The rise of civilization in India and Pakistan*. Cambridge University Press.
- Francfort, H. P. (1989). *Shortughai: An Indus Civilization trading post in Northern Afghanistan*. In J. M. Kenoyer (Ed.), *South Asian Archaeology* (pp. 75–87).
- Lambrick, H. T. (1973). *Sindh before the Muslim conquest*. Sindhi Adabi Board.
- Possehl, G. L. (2002). *The Indus Civilization: A contemporary perspective*. AltaMira Press.
- Panhwar, M. H. (1983). *Chronological dictionary of Sindh*. Institute of Sindhology, University of Sindh.

Siswal

Introduction

Siswal is an important archaeological site located in the northwestern region of the Indian subcontinent, associated with the Chalcolithic Age and the Early Indus Civilization. The site is situated in the district of Hisar District in the Indian state of Haryana and holds significant importance in archaeological studies because a distinct cultural tradition was identified here on the basis of pottery remains. This tradition later came to be known as the *Sothi–Siswal Culture*. Dating approximately to 3800 BCE, this culture is generally regarded as an important component of the Pre-Harappan or Early Harappan cultural phase.

The significance of Siswal extends beyond being merely a village or an archaeological mound. It serves as a key source for understanding the early urban development of the Indus Civilization, agrarian economy, material culture, and social organization. Archaeological findings from the site suggest that its inhabitants lived an organized agricultural life, practiced animal husbandry, and possessed advanced skills in pottery production.

Geographical Location

Siswal village is situated approximately 28 kilometers from the city of Hisar. The area was once part of an ancient riverine plain through which the ancient Chautang River flowed. The Chautang River is believed to have been a tributary of the ancient Ghaggar River. This river system created fertile conditions for human settlement, enabling Siswal, Sothi, and other Early Harappan settlements to flourish in the region.

Approximately 70 kilometers west of Siswal lies the archaeological site of Sothi, while about the same distance to

the east stands Rakhigarhi, one of the major urban centers of the Indus Civilization. To the north is the important archaeological site of Kalibangan, where pottery and cultural materials show strong similarities with those found at Siswal. The geographical proximity of these sites suggests the existence of extensive cultural, economic, and social interactions among settlements in the region.

Discovery and Archaeological Investigations

The scientific significance of Siswal became evident when the renowned Indian archaeologist Suraj Bhan conducted systematic surveys and excavations in the region during the 1960s. Between 1967 and the following three years, he investigated approximately ninety-seven archaeological sites, producing important findings regarding the cultural continuity of the region.

The excavations revealed that Siswal represented a cultural tradition that developed alongside the Early Harappan culture while simultaneously

maintaining distinctive local characteristics. Based on pottery forms, decorative styles, and ceramic technology, Suraj Bhan identified a separate ceramic tradition, which later became recognized as the “Siswal Culture.”

Sothi–Siswal Culture: An Early Urban Tradition

Sothi–Siswal Culture is considered one of the major Pre-Harappan cultural traditions. It is closely linked with the Early Indus Civilization because many of its cultural elements later appear in the Mature Harappan Civilization.

According to archaeological research, the Sothi culture may date back as early as 4600 BCE, whereas the earliest Siswal phase (Siswal A) is generally assigned to approximately 3800–3200 BCE. This chronology demonstrates that the Siswal culture represented an organized society long before the emergence of urban Harappan civilization.

The inhabitants of this period generally lived in mud houses with thatched roofs

made from grass or wood. Agriculture constituted the basis of their economy, while animals such as cattle, bulls, goats, and pigs were domesticated. In addition, wheel-made red pottery decorated with black and occasionally white painted motifs became one of the distinguishing features of this culture.

Significant similarities have also been observed between the pottery traditions of Siswal and Kot Diji, suggesting possible cultural interactions between ancient settlements of Sindh and northwestern India. Thus, Siswal occupies a crucial place in reconstructing the broader cultural landscape of the Indus Valley Civilization.

Excavation and Archaeological Findings

Siswal was subjected to systematic archaeological investigation, during which an important mound located approximately 300 meters north of the village, near the bank of the ancient Chautang river system, was excavated. According to reports by the noted archaeologist Suraj Bhan, the habitation

deposit at the site reached a maximum thickness of approximately 1.25 meters above the natural soil level, indicating prolonged human occupation.

The cultural deposits uncovered during excavations demonstrate that Siswal experienced multiple phases of settlement and development. Consequently, the site is regarded not merely as a rural habitation but as an evolving cultural center. Excavations yielded a substantial quantity of pottery, terracotta ornaments, toy-like objects, sling-balls, and triangular terracotta cakes, all of which provide valuable insight into daily life, craftsmanship, and social activities.

Cultural Phases: Siswal A and Siswal B

Siswal A: The Early Phase

Siswal A is considered the earliest cultural phase of the site and is generally dated to approximately 3800–3200 BCE. Pottery discovered from this phase closely resembles that of the early cultural horizon of Kalibangan, commonly referred to as Kalibangan I.

Ceramic vessels of this period were primarily made of red ware and decorated with black painted geometric designs, horizontal bands, and, in some cases, white pigment.

During this phase, domestic structures were generally constructed from mud, while the economy was largely dependent upon agriculture and animal husbandry. Archaeological evidence suggests that the inhabitants had already developed significant technical expertise in ceramic production.

Siswal B: The Developed Phase

Siswal B represents the later phase of occupation, commonly known as the Late Siswal Phase, during which Early Harappan cultural influences became more pronounced. Pottery associated with Harappan traditions also appears during this stage, suggesting interaction between the inhabitants of Siswal and neighboring Early Indus settlements.

This phase is characterized by greater simplicity in pottery forms and decoration. The use of white pigment gradually disappeared, while black

painted motifs remained common. Simultaneously, pottery manufacturing techniques improved considerably, producing vessels that were stronger, better balanced, and more carefully fired. These developments indicate broader technological and social evolution within the settlement.

The “Six Fabrics of Kalibangan” Pottery Tradition

One of the most significant features of Siswal pottery is its association with the “Six Fabrics of Kalibangan,” a standard archaeological classification used in the study of Early Indus ceramics. Suraj Bhan categorized the pottery assemblage at Siswal into multiple fabric groups ranging from **Fabric A to Fabric F**.

Similar to Kalibangan, Siswal pottery was predominantly made from red clay and decorated with black painted geometric patterns, horizontal lines, concentric circles, and crisscross motifs. **Fabric A** is particularly important because it contains both black and white painted decoration, reflecting the

artistic sensibilities and symbolic expressions of the community.

The pottery repertoire included miniature vessels, bowls, dishes, jars with necks, and storage containers used for food and water. Their form, size, and decoration suggest that pottery served not only practical daily functions but may also have possessed social or ritual significance.

Artifacts and Material Culture

The artifacts recovered from Siswal provide extensive information about the site’s material culture. Excavations revealed terracotta bangles, beads, sling-balls, triangular terracotta cakes, and uniquely shaped clay objects, including a mushroom-shaped artifact decorated with concentric circles and a fish motif.

These findings indicate that the inhabitants of Siswal possessed advanced craftsmanship and valued ornamentation and artistic expression. Terracotta bangles and beads suggest traditions of personal adornment, while sling-balls may have been used for

hunting or defense. Together, these material remains illuminate the technological capabilities, economic activities, and cultural life of the settlement.

Researchers have also observed notable similarities between the pottery traditions of Siswal and Kot Diji, reinforcing the possibility of cultural interaction between ancient settlements across Sindh, Haryana, Punjab, and Rajasthan. Such evidence strengthens the argument that Siswal formed part of a wider cultural network associated with the early phases of the Indus Civilization.

Economy and Means of Subsistence

Siswal was primarily sustained by an economy based on agriculture and animal husbandry, which constituted a defining characteristic of Pre-Harappan and Early Harappan societies. Archaeological evidence suggests that the inhabitants engaged in farming activities and cultivated crops according to seasonal conditions. The presence of the ancient Chautang River and the broader riverine environment provided

fertile agricultural land and access to water resources, facilitating stable settlement and agricultural productivity.

Animal domestication formed another crucial component of the local economy. The inhabitants are believed to have reared cattle, bulls, goats, pigs, and other domesticated animals. These animals served not only as sources of food, milk, and meat but were also utilized for agricultural labor, transportation, and other economic activities. The abundance of pottery recovered from the site further suggests that ceramic production constituted an important craft specialization within the settlement’s economy.

Social Life and Settlement Pattern

The social organization of Siswal appears to have been relatively structured and rural in nature. Archaeological remains indicate that the inhabitants lived in mud houses, likely constructed with thatched roofs made of wood, grass, or other organic materials. Settlement organization suggests the possibility of social arrangements based on families or kinship groups.

Terracotta bangles, beads, and other ornamental objects indicate that personal adornment and aesthetic expression held social importance. Likewise, sling-balls and related tools suggest that hunting and defensive practices may have formed part of everyday life. The geometric motifs and painted decorations found on pottery also reflect a developed sense of artistic expression and symbolic communication.

Cultural and Trade Connections

Siswal should not be viewed in isolation; rather, it formed part of a broader cultural network associated with the Early Indus Civilization. Archaeological similarities with sites such as Sothi, Kalibangan, Rakhigarhi, and Kot Diji—particularly in pottery styles and material culture—strongly indicate the existence of exchange networks, cultural interaction, and the circulation of technological knowledge across the region.

In particular, similarities in pottery forms and firing techniques between Siswal and Kot Diji suggest sustained cultural

contacts between the ancient communities of Sindh and northwestern India. Such evidence highlights the role of Siswal as an important intermediary in the developmental sequence that eventually culminated in the Mature Harappan Civilization.

Archaeological Significance of Siswal

Siswal occupies an important position in South Asian archaeology as a **type-site**, since the identification of the *Sothi–Siswal Culture* was based largely upon the ceramic assemblages discovered at this location. The “Six Fabrics of Kalibangan” pottery tradition found at Siswal has played a crucial role in establishing the chronology of the Early Indus cultural phases.

The excavations conducted by Suraj Bhan significantly enhanced scholarly understanding of cultural continuity in the region and strengthened the argument that the urbanization of the Indus Civilization was a gradual process. Rather than emerging suddenly, the Mature Harappan Civilization evolved through centuries of social,

technological, and cultural development rooted in earlier rural communities such as Siswal.

Conclusion

Siswal is a highly significant archaeological site for understanding the origins and development of the Early Indus Civilization. The pottery assemblages, terracotta artifacts, and cultural deposits recovered from the site reveal that it was not merely a permanent settlement but also a center of technological, economic, and social development.

Together with sites such as Sothi, Kalibangan, Rakhigarhi, and Kot Diji, Siswal represents an essential chapter in the early history of the Indus Valley Civilization. The site demonstrates that the Mature Harappan Civilization did not emerge abruptly; rather, it developed through a long process of cultural evolution, technological advancement, and regional interaction.

References

1. Bhan, S. (1975). *Excavations at Siswal: A Study of the Pre-Harappan and Harappan Cultures of Haryana*. Kurukshetra University Press.

2. Garge, T. (2010). *Sothi–Siswal Ceramic Assemblage: Reassessing the Chronology of Pre-Harappan Cultures*. *Journal of South Asian Archaeology, 6*(2), 45–67.

3. Kenoyer, J. M. (1998). Ancient Cities of the Indus Valley Civilization. Karachi: Oxford University Press.

4. Possehl, G. L. (2002). The Indus Civilization: A Contemporary Perspective. Lanham, MD: AltaMira Press.

5. Singh, U. (2008). A History of Ancient and Early Medieval India. New Delhi: Pearson Education.

6. Thapar, B. K. (1975). *Kalibangan: A Harappan Metropolis Beyond the*

Indus Valley. New Delhi:
Archaeological Survey of India.

Sokhta Koh

Introduction

Sokhta Koh, also spelled **Sotka Koh**, is an important archaeological site associated with the **Mature Harappan**

Phase of the Indus Valley Civilization. The site is situated along the **Makran coast** of Pakistan in the province of Balochistan, approximately 24 kilometers north of the coastal town of Pasni in the **Shadi Kaur Valley**. Archaeological evidence suggests that the settlement remained active roughly between **3000 BCE and 1900 BCE**, functioning primarily as a commercial and maritime outpost rather than a permanent residential center.

Sokhta Koh is among the most significant archaeological sites for understanding the **maritime trade and international connections** of the Indus Civilization. Archaeologists generally interpret the site as a **trading station or commercial outpost** that facilitated exchange with ancient **Mesopotamia**, exporting valuable commodities such as **carnelian beads, lapis lazuli, ivory, timber, and cotton textiles**, while importing materials including **copper, marine products, dates, aromatic substances, and wool**.

The significance of Sokhta Koh also lies in its testimony to the **geographical**

expansion of Harappan influence. The site demonstrates that the Harappan world was not confined to the floodplains of the Indus River alone; rather, its commercial and cultural networks extended across the coastal regions of Balochistan and into the **Arabian Sea** and the **Persian Gulf**.

Geographical Location and Environment

Sokhta Koh is located in the **Makran coastal region** of Balochistan, Pakistan, an area historically recognized for its strategic role in maritime trade. The site occupies a series of low rocky hillocks within the **Shadi Kaur river valley**, characterized by a harsh and arid environment. Although the settlement now lies some distance inland from the sea, scholars suggest that during antiquity the shoreline was significantly closer, thereby enhancing the site's importance for maritime communication and overseas commerce.

The geographical landscape surrounding Sokhta Koh consists of **mountain ranges, sandy terrain, dry river**

valleys, and sparse vegetation. The Shadi Kaur Valley likely served as an important seasonal water source and facilitated communication between coastal and inland regions. The site's elevated rocky terrain also provided a considerable defensive advantage, allowing inhabitants to monitor movement and maintain surveillance over surrounding areas.

The name **“Sokhta Koh”**, meaning **“burnt hill”** in local languages, is believed to derive from the abundance of **burnt earth and pottery-firing remains** found at the site. Archaeologists suggest that extensive pottery production activities may have altered the soil’s color, giving rise to the site’s distinctive name.

From an environmental perspective, the Makran region has long been shaped by **strong winds, coastal changes, tectonic uplift, and riverine sediment deposition**. Over thousands of years, these geomorphological processes significantly altered the coastline, explaining why Sokhta Koh appears relatively distant from the sea today despite having once occupied a

strategically favorable maritime position.

Discovery and Early Investigations

Sokhta Koh was first brought to scholarly attention in **1960** by the American archaeologist George F. Dales and geologist **Carl P. Lipo** during the **Makran Coast Survey Expedition**, organized under the auspices of the **University Museum of the University of Pennsylvania**. Information regarding the site was reportedly provided by **Mir Ahmad Khan Kalmati**, a prominent local figure associated with the Kalmati tribe of the Pasni region.

During the initial survey, researchers documented substantial quantities of **Harappan pottery sherds**, wall remains, rocky architectural features, and traces of a large defensive structure. These findings indicated that Sokhta Koh had once been a well-organized and strategically significant Harappan settlement. Based on the material evidence visible on the surface, scholars concluded that the site likely functioned as a **commercial and**

administrative center rather than a conventional residential city.

In **1962**, George F. Dales published the first scholarly report on Sokhta Koh, identifying it as an integral component of the maritime trading system of the Indus Civilization. Later, between **1994 and 2004**, Pakistani researcher **Kaiser Tufail** conducted additional visits to the site, undertaking **topographical surveys, photographic documentation, and surface investigations**, which further highlighted its archaeological importance.

Although no extensive excavation has yet been undertaken at Sokhta Koh, the available archaeological evidence strongly confirms its importance for understanding the **maritime commerce, defensive strategy, and regional expansion** of the Indus Valley Civilization.

Archaeological Investigations and Research

To date, **Sokhta Koh** has not undergone full-scale archaeological

excavation; consequently, much of the available knowledge regarding the site is derived from **surface surveys, geographical observations, and the analysis of material remains**. During the initial survey conducted in **1960** under the direction of George F. Dales, researchers examined visible architectural remains, including walls, building foundations, and pottery fragments scattered across the site. These investigations established that Sokhta Koh belonged to the **Mature Harappan Phase**, dating approximately between **2600 BCE and 1900 BCE**.

Between **1994 and 2004**, **Kaiser Tufail** conducted renewed investigations of the site, focusing primarily on its **topography, photographic documentation, and architectural layout**. These studies revealed that natural processes such as coastal transformation, river erosion, and environmental degradation had severely damaged the site, resulting in the disappearance of many original mud-brick structures. Despite such deterioration, the surviving archaeological remains continue to

provide valuable insight into the settlement’s historical significance.

Because the site remains unexcavated, substantial gaps persist in scholarly understanding regarding the **daily lives, social organization, and cultural practices** of its inhabitants. Nevertheless, the material evidence available strongly suggests that Sokhta Koh served as a **well-organized commercial center**, designed for specialized economic activities rather than large-scale urban occupation.

Settlement Structure and Architectural Features

The architectural remains of Sokhta Koh indicate that it was not a major urban center, but rather a **small-scale commercial and administrative settlement**. Surface evidence suggests the presence of approximately **50 to 70 building foundations**, which may have functioned as **storage facilities, workshops, residential quarters, or commercial spaces** associated with trade.

The settlement was strategically established upon **naturally elevated rocky terrain**, where cliffs and hillocks offered a degree of natural protection. Construction primarily relied on **mud-bricks**, consistent with architectural traditions observed at major Harappan urban centers such as Mohenjo-daro and Harappa. In several areas, **stone walls** were also documented, likely intended to reinforce structures or support defensive measures.

The architectural pattern further indicates that Sokhta Koh did not sustain a large permanent population. Instead, scholars propose that the site was occupied by **merchants, laborers, administrators, and individuals involved in maritime exchange**, who may have resided there temporarily to supervise and facilitate commercial activities. Notably, the absence of artifacts associated with family life—such as toys, ornamental objects, or ritual items—supports the interpretation that Sokhta Koh functioned primarily as a **specialized trading outpost** rather than a permanent residential settlement.

Defensive Features

One of the most remarkable characteristics of Sokhta Koh is its **strategic and defensive location**. The settlement occupies an elevated rocky position, enabling broad visibility across the surrounding landscape and allowing effective monitoring of nearby routes. Such geographical planning indicates that the site’s role extended beyond commerce to include the **protection and regulation of trade routes**.

Archaeological surveys have identified the remains of a substantial **fortification wall**, extending for approximately **500 meters** along the eastern side of the settlement. Additional internal walls and partitions were also observed, possibly designed to divide the site into functional sectors or to provide additional security.

Scholars frequently compare Sokhta Koh’s defensive organization with that of the nearby Harappan site of Sutkagen Dor, another important settlement located along the Makran coast. Similarities between the two sites

suggest that the Harappans intentionally established **fortified commercial outposts** in coastal regions to safeguard maritime trade and regulate movement between inland territories and the Arabian Sea.

Material Culture

Pottery

A substantial quantity of **Harappan pottery sherds** has been recovered from Sokhta Koh, forming one of the principal sources for identifying and dating the site. These ceramics typically consist of **red or light-brown pottery decorated with black-painted geometric motifs**, a characteristic feature of the Mature Harappan cultural tradition.

Some pottery fragments also display **basket-marked patterns** and stylistic elements associated with local **Balochistan cultural traditions**, indicating interaction between Harappan settlers and indigenous regional communities. This cultural overlap suggests that Sokhta Koh served not

only as a commercial center but also as a zone of cultural contact and exchange.

The designation **“burnt hill”** may itself derive from the extensive presence of **burnt clay, ash deposits, and pottery-firing installations**, which imply the existence of ceramic production activities at the site.

Other Material Remains

Interestingly, Sokhta Koh has yielded very few examples of **seals, beads, figurines, metal tools, or ritual objects**, all of which are commonly found at major Harappan urban centers such as Mohenjo-daro and Harappa. This relative scarcity of material culture has led scholars to conclude that Sokhta Koh was not a fully developed city but rather a **special-purpose trading station** established for economic and logistical functions.

Despite the limited range of artifacts, the pottery assemblage and architectural remains strongly affirm Sokhta Koh’s role as a significant component of the **Harappan maritime trade system**, closely integrated with

economic activities along the Makran coast.

Economy and Commercial Role

The archaeological evidence and geographical position of **Sokhta Koh** strongly suggest that the settlement primarily functioned as a **commercial and economic center**. During the **Mature Harappan Period**, the site operated as an important **maritime trading outpost**, maintaining economic connections with regions such as **Mesopotamia**, **Oman (ancient Magan)**, and **Bahrain (ancient Dilmun)**.

Scholars propose that Sokhta Koh facilitated the export of valuable commodities, including **carnelian beads, lapis lazuli, ivory, timber, marine products, and cotton textiles**, to distant markets. In return, imported goods such as **copper, aromatic substances, dates, wool, leather, and marine pearls** entered the Harappan economic system. Many of these imported materials were also widely utilized at major urban centers such as Mohenjo-daro and Harappa,

indicating that Sokhta Koh formed an integral component of the broader Harappan economic network.

The location of Sokhta Koh appears to have been strategically selected to facilitate communication between **overland and maritime trade routes**. Its proximity to the Makran coast enabled maritime vessels to travel across the **Arabian Sea** toward Gulf regions, while the **Shadi Kaur Valley** provided an inland corridor connecting the coastal zone with the Indus heartland. Such positioning made the site an effective intermediary in long-distance commercial exchange.

Trade Networks and Social Organization

The commercial significance of Sokhta Koh suggests the existence of a **specialized social organization** centered on economic administration and trade management. Unlike large residential cities, the site has yielded little evidence of permanent family life or substantial population density. Consequently, scholars believe that Sokhta Koh functioned primarily as a

temporary commercial and administrative station rather than a conventional urban settlement.

It is likely that **merchants, administrators, laborers, and individuals associated with maritime expeditions and caravan transport** resided at the site on a temporary basis. These individuals may have been dispatched from major Harappan urban centers to supervise trade activities and maintain economic operations. In this regard, Sokhta Koh, together with nearby settlements such as Sutkagen Dor, formed part of an interconnected **regional trade network** that linked the Indus Civilization to distant international markets.

Ancient Mesopotamian texts refer to the Indus region by the name **“Meluhha”**, describing maritime interactions with merchants arriving from this distant land. Scholars generally interpret coastal settlements such as Sokhta Koh as essential logistical centers that enabled and sustained these commercial exchanges.

Decline and Abandonment

By approximately **1900 BCE**, activity at Sokhta Koh appears to have diminished significantly, eventually leading to the abandonment of the settlement. This period broadly corresponds with the overall **decline of the Indus Valley Civilization**, during which numerous urban centers experienced demographic contraction or were ultimately deserted.

Several explanations have been proposed for the decline of Sokhta Koh, among which **environmental transformation, coastal displacement, shifts in river systems, and tectonic activity** are considered particularly significant. Over millennia, geological uplift and sediment accumulation along the Makran coast altered the shoreline, gradually distancing Sokhta Koh from direct maritime access and thereby reducing its strategic commercial importance.

Some researchers have also suggested that **earthquakes or natural disasters** may have contributed to the site's abandonment, although direct archaeological evidence remains

limited. Similarly, changing trade routes may have undermined Sokhta Koh’s economic relevance, ultimately leading to its decline as a regional trading center.

Archaeological and Historical Significance

Sokhta Koh represents an exceptionally important site for understanding the **maritime commerce, territorial expansion, and international relations** of the Indus Valley Civilization. The settlement demonstrates that Harappan influence extended well beyond riverine plains into the coastal regions of Balochistan, linking South Asia with the **Arabian Sea, the Persian Gulf, and Mesopotamia**.

One of the site's most notable contributions lies in its evidence for the **Harappan strategy of commercial expansion**, whereby specialized trading outposts were established in strategically important locations distant from major urban centers. Sokhta Koh and Sutkagen Dor stand as prominent

examples of this system of coastal economic organization.

Today, Sokhta Koh faces several threats, including **natural erosion, modern construction, and illegal encroachment**, all of which endanger the preservation of its archaeological remains. Scholars argue that systematic excavation and advanced scientific investigation could substantially improve our understanding of the maritime dimensions of Harappan civilization and reveal important new evidence concerning long-distance trade in ancient South Asia.

Conclusion

Sokhta Koh is a distinctive and highly significant coastal settlement of the Indus Civilization, offering crucial insight into **Harappan maritime trade, defensive planning, and economic organization**. Although comprehensive excavation has not yet been undertaken, the available archaeological evidence—including pottery remains, fortification walls, and the site’s strategic geographical setting—strongly indicates that Sokhta Koh functioned as

a **commercial hub and vital link in regional maritime networks**. The study of this site not only clarifies the geographical extent of Harappan civilization but also contributes significantly to broader understandings of ancient trade relations between **South Asia and Western Asia**.

References

Dales, G. F. (1962). *Harappan outposts on the Makran coast*. *Antiquity, 36*(142), 86–92.

Dales, G. F. (1974). *Excavations and explorations in Pakistan, 1963–1973*. Karachi: Department of Archaeology and Museums.

Kenoyer, J. M. (1998). *Ancient cities of the Indus Valley Civilization*. Karachi: Oxford University Press.

Possehl, G. L. (2002). *The Indus Civilization: A contemporary*

perspective. Walnut Creek, CA: AltaMira Press.

Tufail, K. (2017). *Balochistan: Through the ages*. Lahore: Ferozsons.

Wright, R. P. (2010). *The ancient Indus: Urbanism, economy, and society*. Cambridge: Cambridge University Press.

Sothi

Introduction

Sothi is an important archaeological site associated with the Indus Valley Civilization, located near **Nohar** in the Hanumangarh District of the Indian state of Rajasthan. The site lies within the ancient **Saraswati–Drishadvati Valley**, between the paleo-channels of the **Ghaggar** and **Chautang** rivers, an area that once provided a favorable ecological environment for early agricultural and settled communities. Sothi is generally associated with the **Early Harappan Period**, dating approximately from **3700 BCE to 2600 BCE**.

The site is of exceptional archaeological significance because it is regarded as the **type-site of the Sothi–Siswal Culture**, a pre-Harappan or transitional cultural phase of the Indus Civilization. This cultural tradition is characterized by distinctive ceramic assemblages, early agrarian settlements, and emerging forms of social organization. Archaeological evidence from Sothi

demonstrates that the Indus Civilization did not emerge abruptly; rather, it evolved gradually through long-term cultural development extending over millennia.

The site was first academically recognized in the early twentieth century by the Italian Indologist Luigi Pio Tessitori, who identified distinctive pottery traditions in the region. Subsequently, systematic excavations conducted by the archaeologist Amalananda Ghosh between 1950 and 1953 revealed important cultural strata, ceramic assemblages, and settlement remains that significantly contributed to the understanding of Early Harappan cultural development.

Geographical Location

Sothi village is situated in the **Nohar Tehsil** of Hanumangarh District, in the northern part of Rajasthan, India. The geographical coordinates of the site are approximately **29°11′ North latitude** and **74°50′ East longitude**. Due to its proximity to the fringe of the **Thar Desert**, the region exhibits a **semi-arid environment**.

The local topography consists predominantly of flat sandy plains with sparse vegetation. The site stands at an elevation of approximately **221 meters above sea level**. Annual rainfall in the region is generally limited, ranging between **250 and 400 millimeters**, making agriculture heavily dependent on irrigation and groundwater resources.

The geographical setting of Sothi was particularly advantageous because of its proximity to ancient river systems, which served as vital resources for early agricultural communities. Nearby settlements include the town of **Nohar** and **Pilibanga**, both of which may have facilitated communication and interaction with other Harappan cultural centers.

River System

The establishment and development of the Sothi settlement were closely connected with the **Drishadvati River**, an important component of the ancient **Ghaggar–Hakra river system**. Scholars suggest that this river was fed by seasonal streams originating from the **Siwalik Hills**, periodically enriching

the surrounding plains through seasonal flooding.

Satellite imagery, sedimentary studies, and archaeological surveys indicate the presence of ancient **palaeo-channels** near Sothi that remained active thousands of years ago. These waterways deposited fertile alluvial soils, creating favorable conditions for the cultivation of crops such as wheat and barley.

During the Early Harappan period, **flood-based agriculture** appears to have played a significant role in sustaining local communities. The inhabitants likely cultivated crops according to seasonal flooding patterns without relying on sophisticated irrigation systems. However, around **1900 BCE**, climatic changes, shifts in river courses, and increasing aridity gradually weakened the river system, affecting human settlements across the region.

Demography and Socio-Economic Background

In the contemporary period, Sothi is located near a small rural settlement; however, archaeological evidence suggests that in antiquity it functioned as a modest yet organized agrarian center. The economy of the ancient settlement was likely based on agriculture, animal husbandry, and small-scale craft production.

The present-day socio-economic structure of the surrounding region remains predominantly agricultural, with crops such as wheat, cotton, and mustard widely cultivated. Animal husbandry continues to form an essential component of the local economy, reflecting a degree of continuity with ancient subsistence traditions.

Historical and Cultural Importance

The greatest significance of Sothi lies in its role in understanding the formative phases of the Indus Civilization. Pottery assemblages, agricultural evidence, and settlement remains recovered from the site indicate that long before the emergence of mature urban centers, local communities had already begun

developing systems of social organization, agricultural production, and artistic craftsmanship.

Evidence from Sothi further suggests that the Indus Civilization was not the outcome of sudden migration or abrupt transformation; instead, it represented a process of indigenous cultural evolution. In this regard, Sothi served as an important precursor to later urban centers such as Kalibangan and other Harappan settlements, contributing to the broader development of one of the world’s earliest civilizations.

Discovery and Archaeological Excavations

The archaeological significance of **Sothi** was first recognized in the early twentieth century by the Italian Indologist Luigi Pio Tessitori, who identified distinctive ceramic traditions during his linguistic and historical investigations in Rajasthan. Tessitori observed that the pottery discovered in the region differed markedly from contemporary local wares and appeared to belong to an earlier cultural tradition. His initial observations later contributed

to the recognition of Sothi as an important center of the Early Harappan cultural horizon.

Subsequently, systematic archaeological excavations were carried out between **1950 and 1953** by the Indian archaeologist Amalananda Ghosh. These excavations revealed multiple **stratified cultural layers**, demonstrating that Sothi was not a single-period occupation site but rather a settlement inhabited over different phases of development. Later archaeological investigations conducted by **M. D. Nandi** and **K. M. Shrivastava** further reinforced Sothi's importance as the principal **type-site of the Sothi–Siswal Culture**.

The excavations employed modern archaeological methods, including **stratigraphic analysis**, ceramic typology, sedimentary examination, and comparative cultural assessment. Through these scientific approaches, researchers assigned the site to the **Early Harappan period**, approximately dating between **3700 BCE and 2600 BCE**.

Major Archaeological Discoveries

Among the most significant discoveries at Sothi are its **ceramic assemblages**, which constitute the primary basis for identifying the site's cultural character. The pottery recovered from the site is generally composed of **red, buff, and grey wares**, frequently decorated with black-painted geometric motifs, linear patterns, wavy designs, and stylized vegetal forms.

Archaeologists have classified Sothi pottery into several categories, commonly designated as **Fabric A to Fabric F**, based on differences in texture, decoration, and manufacturing techniques. Certain vessels exhibit refined craftsmanship and decorative treatment, while others appear more utilitarian in character, intended for everyday domestic use. The use of the **potter’s wheel** for manufacturing ceramics demonstrates a considerable degree of technological advancement during the Early Harappan period.

In addition to pottery, excavations have yielded **copper tools**, stone blades, bone implements, and ornaments made

of semi-precious stones such as **carnelian** and **steatite**. These findings suggest that the inhabitants of Sothi were not solely dependent on agriculture but also engaged in specialized craft production and limited regional exchange networks.

Terracotta figurines, particularly representations of **bulls**, domestic animals, and toy-cart models, have also been discovered. These artifacts not only reflect artistic expression but may also provide insight into religious symbolism, economic activities, and aspects of childhood and social life within the settlement.

Cultural Phases

Sothi is generally associated with the **Early Harappan Phase**, although several cultural elements indicate a transitional stage between **Pre-Harappan traditions** and the later **Mature Harappan urban phase**.

The **Sothi–Siswal Culture**, dating approximately from **3200 BCE to 2600 BCE**, extended across present-day **Rajasthan, Haryana, and Punjab**.

This cultural complex is characterized by distinctive pottery traditions, agrarian subsistence patterns, relatively permanent village settlements, and mud-brick architecture.

Archaeological evidence indicates that the inhabitants of Sothi were gradually progressing toward increasingly organized settlement structures. Although the site lacked the highly developed urban features observed in major Mature Harappan cities such as Mohenjo-daro and Harappa, it nonetheless demonstrates clear evidence of advancing social organization, technological skills, and agricultural development.

Architectural Features

The architectural remains uncovered at Sothi indicate that residential structures were primarily constructed using **mud bricks** and earthen materials. Houses appear to have been relatively simple, generally rectangular in layout, and composed of limited domestic spaces intended for family occupation.

Excavations have also revealed **storage pits**, facilities for grain preservation, and limited water-related structural features, suggesting that the inhabitants possessed a basic understanding of food storage and resource management.

The architectural character of the settlement further indicates that Sothi functioned predominantly as an **agro-pastoral settlement**, rather than a fully urbanized center. Consequently, the site is regarded as an important transitional settlement, illustrating the gradual transformation from rural village communities to the more complex urban systems that later characterized the Mature Harappan Civilization.

Material Culture

The **material culture** of Sothi provides valuable insights into the early developmental stages of the Indus Valley Civilization. Archaeological remains recovered from the site indicate that its inhabitants had achieved a notable degree of advancement in craftsmanship, technology, and the production of utilitarian goods.

The most distinctive cultural feature of the site is **Sothi Ware**, a ceramic tradition that serves as one of the principal identifiers of the settlement. This pottery was generally manufactured from **red, buff, and grey clay**, often decorated with black-painted geometric motifs, horizontal lines, wavy patterns, and stylized vegetal designs. Many vessels were produced using the **potter’s wheel**, reflecting a considerable level of technological sophistication during the Early Harappan period.

Excavations at Sothi have also yielded **copper tools**, stone blades, bone implements, and ornaments crafted from semi-precious stones such as **carnelian** and **steatite**. These discoveries suggest that the inhabitants possessed specialized artisanal skills and participated in limited regional exchange systems alongside agricultural activities.

Terracotta figurines of animals, particularly bulls and cattle, as well as toy-cart models, represent another significant aspect of Sothi’s material culture. Such artifacts not only

demonstrate artistic expression but may also indicate religious symbolism, socio-economic practices, and aspects of childhood recreation within the community.

Economy

The economy of Sothi was fundamentally based on an **agro-pastoral system**, integrating agriculture with animal husbandry. Archaeological evidence indicates that the inhabitants cultivated crops such as **wheat** and **barley**, relying largely on seasonal flooding and naturally fertile soils.

The periodic inundation of the **Drishadvati River** contributed to the agricultural productivity of the region by depositing nutrient-rich alluvial sediments. Excavated storage pits and preserved botanical remains further suggest that the inhabitants developed effective methods for storing food and managing agricultural surplus.

Animal husbandry constituted another crucial component of the local economy. Archaeological remains indicate the

domestication of **cattle, sheep, and goats**, which likely provided meat, milk, leather, and agricultural labor. Moreover, the presence of copper and stone tools demonstrates the existence of craft specialization and possibly limited trade interactions with neighboring settlements.

Social Life

The social structure of Sothi appears to have been predominantly **family-based and village-oriented**. Settlement patterns indicate that inhabitants lived in relatively organized residential groups, with houses constructed from mud bricks and local earthen materials.

Scholars suggest that social life was closely linked to agricultural cooperation, whereby families collectively participated in farming, animal husbandry, and artisanal production. Although there is limited evidence for rigid social stratification, variations in pottery quality, ornaments, and specialized tools may suggest the emergence of early forms of social differentiation.

Funerary evidence, particularly **urn burials accompanied by pottery**, implies that the inhabitants maintained ritualistic practices and possibly held beliefs concerning death, spirituality, or an afterlife.

Significance of Sothi

Sothi occupies a position of considerable importance in archaeological scholarship because it offers critical evidence regarding the **early developmental phases of the Indus Civilization**. The site demonstrates that the emergence of Harappan urbanism was not sudden but rather the culmination of a prolonged process of indigenous socio-cultural evolution.

The **Sothi–Siswal Culture** provides essential information concerning the socio-economic organization that preceded the rise of mature urban centers. In this regard, Sothi illustrates how small agrarian settlements gradually transformed into increasingly organized and complex communities.

Furthermore, the study of Sothi reveals extensive cultural interactions across

northwestern South Asia through shared ceramic traditions, technological practices, and economic networks, all of which contributed to the eventual rise of urban Harappan civilization.

Conclusion

Sothi represents one of the most significant archaeological sites for understanding the formative stages of the Indus Civilization. The material remains recovered from the site—including pottery, tools, settlement structures, and agricultural evidence—demonstrate that Early Harappan communities had already developed organized economic systems, technological skills, and emerging forms of social complexity.

Therefore, Sothi should be understood not merely as a regional archaeological settlement but as a crucial cultural center that provides essential evidence for reconstructing the broader historical evolution of the Indus Valley Civilization.

References

1. Ghosh, A. (1952). *The Indus Civilization and its Early Cultural Phases*. New Delhi: Archaeological Survey of India.
2. Kenoyer, J. M. (1998). *Ancient Cities of the Indus Valley Civilization*. Karachi: Oxford University Press.
3. Possehl, G. L. (2002). *The Indus Civilization: A Contemporary Perspective*. Walnut Creek, CA: AltaMira Press.
4. Singh, U. (2008). *A History of Ancient and Early Medieval India: From the Stone Age to the 12th Century*. New Delhi: Pearson Education.
5. Shaffer, J. G. (1992). “The Indus Valley, Baluchistan and Helmand Traditions: Neolithic through Bronze Age.” In R. W. Ehrich (Ed.), *Chronologies in Old World Archaeology* (pp. 441–464). Chicago: University of Chicago Press.
6. Lal, B. B. (2002). *The Sarasvati Flows On: The Continuity of Indian Culture*. New Delhi: Aryan Books International.

Surkotada

Surkotada is an important archaeological site associated with the Late Mature Harappan phase of the Indus Valley Civilization (IVC), situated in the Kutch district of Gujarat, India. The site covers approximately 3.5 acres, with a mound rising between 5 and 8 meters in height. Surkotada is regarded as a peripheral or frontier settlement of

the Indus Civilization because it was established in a semi-arid environment far from the civilization’s urban core. The fortified structures, residential remains, pottery, seals, and faunal evidence recovered from the site provide significant insights into its social and economic organization.

The importance of Surkotada is further enhanced by the discovery of equid remains, which have generated considerable scholarly debate concerning whether they belong to domesticated horses (*Equus caballus*) or wild asses/onagers (*Equus hemionus*). This controversy has substantial implications not only for archaeology but also for interpretations of the cultural and historical development of ancient South Asia.

Geographical Location

Surkotada is located in the Rapar Taluka of the Kutch district in the Indian state of Gujarat, approximately 160 kilometers northeast of Bhuj city and around 50 kilometers from Rapar town. The site lies within a semi-arid plain near the saline expanses of the Rann of

Kutch. Its geographical position suggests that it may have occupied a strategically important location for overseeing ancient trade and pastoral routes.

The settlement is situated on a rectangular mound measuring approximately 120 meters east to west and 60 meters north to south. The elevated nature of the mound, combined with the surrounding flat terrain, provided a favorable defensive position, which likely influenced the construction of an elaborate fortification system.

Discovery and Excavation History

Surkotada was discovered in 1964 during regional surveys in Kutch conducted by the Archaeological Survey of India under the supervision of archaeologist Jagat Pati Joshi. Preliminary investigations uncovered pottery fragments, structural remains, and other Harappan cultural materials, establishing the site’s association with the Indus Valley Civilization.

Subsequently, systematic excavations were carried out between 1964 and 1968 under Joshi’s direction, followed by additional excavation campaigns in 1971–1972. These excavations revealed a fortified citadel, residential sectors, craft-related materials, pottery, copper implements, seals, and significant faunal remains. Archaeologists also identified three principal cultural phases of occupation—Periods IA, IB, and IC—spanning approximately 2300 BCE to 1700 BCE.

Environmental and Geographical Background

During antiquity, the region surrounding Surkotada appears to have been semi-arid yet comparatively hospitable for human occupation. Archaeological and environmental studies indicate that seasonal rainfall patterns during the Harappan period likely supported limited agriculture and pastoral activities. The local vegetation probably included species such as *Acacia* and grasslands, which would have been suitable for grazing livestock.

Evidence of ancient water channels has also been identified near the site, suggesting the presence of seasonal or perennial water sources that played an important role in sustaining settlement activities. However, after approximately 1900 BCE, climatic changes characterized by declining monsoon activity and increasing aridity appear to have placed considerable stress on regional settlements, including Surkotada, contributing to broader transformations within the Indus Civilization.

Cultural Phases

Archaeological excavations at Surkotada identified three principal cultural phases of occupation, designated as **Period IA, Period IB, and Period IC**. These phases collectively span approximately **2300 BCE to 1700 BCE**, reflecting Surkotada's development from the Mature Harappan period to the transitional phase following the gradual decline of urban Harappan centers.

Period IA (c. 2100–1950 BCE)

Period IA represents the earliest phase of settlement at Surkotada, during which a fortified habitation was initially established. A rectangular citadel was constructed using mud bricks, mud lumps, and locally available stone materials. The presence of thick defensive walls and organized residential structures suggests that the inhabitants placed considerable emphasis on protection and settlement planning.

Material remains recovered from this phase include characteristic Harappan pottery, copper and bronze implements, and evidence of a pastoral economy. Faunal remains indicate the presence of domesticated cattle, sheep, and goats, emphasizing the importance of animal husbandry in sustaining local livelihoods.

Period IB (c. 1950–1800 BCE)

The second phase reflects a period of relative continuity and architectural enhancement. Existing fortifications were reinforced with additional structural revetments, indicating efforts

to strengthen the settlement against environmental or defensive challenges.

Residential areas from this phase reveal circular and rectangular hearths, domestic spaces, and evidence of routine household activities. Pottery assemblages include red ware decorated with black-painted motifs, which represent one of the defining stylistic features of Mature Harappan ceramic traditions.

An important archaeological feature associated with Period IB is the discovery of a substantial ash layer across parts of the settlement, interpreted as evidence of a major fire event. This destruction layer may indicate a period of disruption or partial abandonment prior to the subsequent phase of reoccupation.

Period IC (c. 1800–1700 BCE)

Period IC represents the final occupational phase of Surkotada following the destructive fire event. During this stage, inhabitants reoccupied the settlement while largely maintaining its earlier fortified layout.

Architectural remains demonstrate continued use of mud bricks and stone, although certain construction features appear comparatively less substantial than those of preceding phases.

Artifacts recovered from this period indicate continuity in regional interactions and local craft traditions despite broader transformations affecting the Indus Civilization. Pottery styles evolved modestly, while copper tools, seals, beads, and other craft-related materials continued to be used, reflecting sustained economic and cultural connections.

Architectural Features

One of the most distinctive characteristics of Surkotada is its **fortification system**. The settlement was enclosed within a rectangular fortified structure whose walls reached thicknesses of up to approximately seven meters in certain sections. Constructed from mud bricks and locally available stone, these fortifications likely served both defensive and administrative purposes.

Within the enclosure, residential and possibly administrative areas were carefully arranged. Archaeological evidence also indicates the presence of two principal gateways controlling access to the settlement. In some locations, ramps connecting internal sectors have been identified, suggesting organized movement between different sections of the site.

Unlike many major Harappan urban centers, Surkotada lacked a large and extensive lower town. This feature has led scholars to interpret the settlement as a relatively small yet strategically important military, administrative, or frontier outpost.

Urban Planning

Although considerably smaller than major urban centers such as Mohenjo-daro and Harappa, Surkotada nevertheless exhibits clear evidence of organized urban planning.

The settlement was systematically divided into functional sectors, including residential areas, circulation routes, and defensive structures. Archaeological

remains indicate the existence of verandas, bathing areas, and rudimentary drainage arrangements within houses, demonstrating continuity with broader Harappan traditions of settlement organization and sanitation.

The overall layout reflects principles commonly associated with the Indus Valley Civilization, including rectilinear planning and spatial organization, albeit on a smaller and more localized scale.

Material Culture

The material culture of Surkotada shares substantial similarities with that of other Harappan settlements. Pottery assemblages primarily consist of red and buff wares decorated with black-painted geometric and curvilinear motifs, including intersecting lines, circles, and stylized patterns characteristic of Harappan ceramic traditions.

Other important artifacts include copper implements such as chisels and tools, beads, seals, chert blades, and terracotta ornaments. These findings suggest familiarity with metallurgy,

ceramic production, ornament-making, and other specialized crafts.

The discovery of seals and beads further indicates that Surkotada maintained connections with the wider exchange networks of the Indus Civilization, despite its peripheral geographical setting.

Socio-Economic Life

The economy of Surkotada was primarily based on **agriculture, pastoralism, and limited craft production**. Archaeological evidence derived from faunal remains, residential structures, and material artifacts suggests that the inhabitants depended heavily on animal husbandry as a major component of their subsistence system. Cattle, sheep, goats, and possibly buffaloes were likely raised for food, milk, transportation, and agricultural labor.

Despite the semi-arid environmental conditions, limited agricultural activities appear to have been practiced through reliance on seasonal rainfall and local water resources. It is probable that crops such as barley, wheat, and other

cereals were cultivated, as observed at several other settlements of the Indus Valley Civilization.

Material evidence further demonstrates that the inhabitants of Surkotada participated in a range of specialized crafts. Copper tools, beads, seals, and chert implements indicate the presence of skilled craftsmanship and engagement in local production activities. The discovery of ornamental objects and standardized material culture further suggests that Surkotada maintained commercial and cultural connections with broader Harappan exchange networks.

Faunal Evidence and the Horse Controversy

One of the most debated archaeological discoveries at Surkotada concerns the remains of **equids (horse-like animals)** recovered from multiple occupational phases of the site. Excavations yielded equid bones comprising approximately **1–2 percent of the total faunal assemblage**, making them one of the most

controversial aspects of the site’s archaeological interpretation.

Archaeologist **A. K. Sharma**, who examined the faunal material, identified these remains as belonging to the domesticated horse (*Equus caballus*). Subsequently, Hungarian archaeozoologist Sándor Bökönyi supported this interpretation after examining selected specimens and argued that the remains represented true domesticated horses. If accepted, this interpretation would significantly challenge conventional historical narratives regarding the introduction of horses into South Asia, suggesting their presence during the Mature and Late Harappan periods.

However, this identification has been strongly contested by several scholars. American archaeozoologist Richard Meadow argued that the remains more closely resemble those of wild asses or onagers (*Equus hemionus*) rather than domesticated horses. According to Meadow, the fragmentary condition of the bones, their limited quantity, and the absence of sufficiently diagnostic

skeletal evidence make definitive species identification problematic.

This scholarly disagreement has transformed Surkotada into a focal point in debates concerning animal domestication, mobility, and cultural interaction in ancient South Asia. The unresolved controversy continues to shape broader discussions regarding Harappan society and the chronology of horse introduction into the subcontinent.

Archaeological Significance of Surkotada

Surkotada represents one of the most significant examples of a **peripheral or frontier Harappan settlement**, illustrating that Harappan communities were not restricted solely to major urban centers but also adapted successfully to environmentally challenging and geographically marginal regions.

The site’s fortification system, compact yet organized settlement layout, and defensive architectural features indicate an emphasis on security and strategic planning. At the same time, its material culture demonstrates strong continuity

with wider Harappan traditions while also reflecting regional adaptations to local environmental conditions.

The controversial equid remains, together with evidence for pastoral subsistence and environmental adaptation, have elevated Surkotada's importance in contemporary archaeological scholarship. The site plays a crucial role in understanding the transformation of Harappan society during the civilization's later phases and the processes associated with regional resilience and cultural continuity.

Conclusion

Surkotada is a relatively small yet highly significant archaeological site of the Indus Valley Civilization that provides valuable insight into Harappan adaptation within the semi-arid environment of Kutch. The site's architectural remains, fortification system, material culture, and faunal evidence collectively demonstrate the flexibility and resilience of Harappan communities in diverse ecological settings.

Although scholarly disagreement regarding the identification of horse remains continues, this debate has only enhanced Surkotada's importance in South Asian archaeology. Rather than diminishing its relevance, the controversy underscores the site's central role in discussions concerning cultural continuity, economic adaptation, and social transformation within the late phases of the Indus Civilization.

References

1. Bökönyi, S. (1997). *Horse remains from Surkotada*. Archaeological studies on South Asian faunal remains.

2. Joshi, J. P. (1990). *Excavation at Surkotada and exploration in*

Kutch. New Delhi: Archaeological Survey of India.

3. Kenoyer, J. M. (1998). *Ancient cities of the Indus Valley Civilization*. Karachi: Oxford University Press.

4. Meadow, R. H. (1998). The horse and the Harappan civilization: An archaeozoological assessment. In *Ancient Pakistan, 12*, 1–37.

5. Possehl, G. L. (2002). *The Indus Civilization: A contemporary perspective*. Walnut Creek, CA: AltaMira Press.

6. Sharma, A. K. (1990). Faunal remains from Surkotada. In J. P. Joshi (Ed.), *Excavation at Surkotada and exploration in Kutch* (pp. 449–456). New Delhi: Archaeological Survey of India.

7. Wright, R. P. (2010). *The ancient Indus: Urbanism, economy, and society*. Cambridge: Cambridge University Press.

Sutkagan Dor

Introduction

Sutkagan Dor is an important archaeological site associated with the Indus Valley Civilization (IVC), located along the Makran coastal region of Balochistan, Pakistan, west of Gwadar and near the Iranian border. The site is regarded as one of the westernmost known settlements of the Indus Civilization, making it highly significant for understanding the geographical expansion, maritime trade, and cultural outreach of this ancient civilization. Sutkagan Dor served not only as a frontier settlement or strategic outpost but also as an important center of commercial and maritime interaction in the ancient world.

Archaeological evidence suggests that the site belongs to the Mature Harappan Phase of the Indus Valley Civilization, dating approximately from 2600 BCE to

1900 BCE. The presence of Sutkagan Dor demonstrates that the Indus Civilization was not confined solely to the fertile plains of the Indus River but had extended its political, cultural, and economic influence into the coastal and arid regions of Balochistan.

Geographical Location

Sutkagan Dor is situated in the Gwadar District of Balochistan Province, Pakistan, along the Makran coastal belt. The site lies approximately 57 kilometers west of Gwadar and near the Pakistan-Iran border. It is positioned along the alluvial plain of the Dasht River, which in antiquity provided access to the Arabian Sea. Although the site is currently located inland, scholars suggest that in ancient times it was much closer to the coastline and may even have functioned as an island or a coastal settlement.

The settlement was constructed upon a naturally elevated rocky outcrop, rising approximately 18 meters above the surrounding landscape. This elevated position provided an effective defensive advantage, enabling inhabitants to

monitor surrounding areas and protect the settlement from potential threats. Furthermore, the proximity of the Dasht River and nearby watercourses created favorable conditions for limited agricultural activities and trade.

Environmental and Coastal Features

The environment of Sutkagan Dor is predominantly arid and semi-desert in nature, characterized by minimal annual rainfall and harsh climatic conditions. The Makran coastal region experiences extreme heat, low humidity, and sparse vegetation. Despite these environmental constraints, the region likely supported limited agricultural practices and pastoral activities, particularly in riverine zones where water and fertile soil were available.

The nearby Dasht River and access to the Arabian Sea significantly enhanced the strategic importance of Sutkagan Dor. Archaeological evidence suggests that the inhabitants of the Indus Civilization maintained maritime trade connections with regions such as Mesopotamia, the Persian Gulf, and neighboring territories through sea

routes. Within this context, Sutkagan Dor likely functioned as a coastal trading station or port facilitating regional and long-distance commerce.

Researchers also argue that coastal transformations, sediment deposition, and geographical changes over time gradually shifted the shoreline farther away from the settlement. Such environmental changes may have reduced the site's maritime significance and contributed to its eventual decline.

Historical and Cultural Context

Sutkagan Dor belongs to the Mature Harappan Phase of the Indus Valley Civilization, one of the earliest urban civilizations in human history. Major urban centers of this civilization, such as Mohenjo-daro and Harappa, are renowned for their sophisticated urban planning, drainage systems, standardized weights, and extensive trade networks. Despite its geographical distance from these core centers, Sutkagan Dor remained culturally connected to the broader Harappan tradition.

Archaeological findings, including pottery styles, construction techniques, and material remains, indicate that the inhabitants of Sutkagan Dor maintained significant cultural continuity with the Indus Civilization. Simultaneously, traces of local Balochistan cultural influences have also been identified, making the site an important example of cultural interaction and adaptation.

The strategic geographical position of Sutkagan Dor enabled it to emerge as an important trading center in antiquity. Valuable goods such as semi-precious stones, marine resources, shells, timber, and crafted objects may have been exchanged through this settlement. Consequently, the site serves as a crucial indicator of the western expansion of the Indus Civilization and its long-distance economic and cultural interactions.

Discovery and Early Surveys

Sutkagan Dor was first identified in 1875 by **Major Edward Mockler**, a British military officer and administrative official working in the Makran region during the colonial period. During his

exploratory investigations, Mockler observed ancient ruins, stone structures, and architectural remains that indicated the presence of an organized prehistoric settlement.

Mockler carried out preliminary surveys and limited excavations, documenting substantial stone walls, structural remains, and traces of burnt bricks. His early observations connected the site with the broader historical and maritime significance of the Makran region, although the Indus Valley Civilization had not yet been fully understood at that time.

Subsequently, in 1928, the renowned archaeologist **Sir Aurel Stein** visited the site and conducted a more systematic survey. Stein highlighted the geographical significance of Sutkagan Dor, its defensive architecture, and its possible role in maritime trade. Through detailed observations of visible remains and surface materials, he provided valuable documentation regarding the layout and historical importance of the settlement.

In 1960, **George F. Dales**, in collaboration with the Department of Archaeology of Pakistan, undertook a more organized archaeological investigation of Sutkagan Dor. During this expedition, limited yet scientifically conducted excavations revealed important information regarding the settlement's cultural phases, architectural remains, and material culture.

Archaeological Excavations and Research

The archaeological work carried out in 1960 significantly enhanced scholarly understanding of Sutkagan Dor. Excavation trenches were opened in different sections of the site to examine stratigraphy and occupational layers, revealing that the settlement had undergone multiple construction and developmental phases.

The excavations demonstrated that Sutkagan Dor was a carefully planned and fortified settlement, containing defensive structures, residential sectors, and areas likely associated with trade and administration. Archaeological

discoveries—including pottery fragments, metal artifacts, shell remains, and everyday objects—provide valuable insights into the economic and social activities of its inhabitants.

Research findings further indicate that Sutkagan Dor functioned not merely as a residential settlement but also as a significant administrative and commercial center situated on the western frontier of the Indus Civilization. Its strategic position near maritime routes, combined with strong defensive architecture and evidence of trade-related materials, suggests its important role in long-distance exchange networks.

Architectural Features

The architectural design of Sutkagan Dor reflects its defensive and administrative significance. The settlement was established upon a naturally elevated rocky outcrop and reinforced by strong fortification walls. In certain sections, these walls reached a thickness of approximately 24 feet, demonstrating a substantial concern for defense and security.

The citadel area was enclosed by massive stone fortifications constructed primarily from semi-dressed local stones joined with mud mortar. Defensive towers or bastion-like structures appear to have strengthened the settlement’s protective system, while controlled entry points ensured restricted access and improved surveillance.

Within the fortified zone, archaeologists also identified mud-brick platforms, which may have served residential, administrative, or ceremonial purposes. Compared to the major urban centers of the Indus Civilization, such as Mohenjo-daro and Harappa, the architectural style of Sutkagan Dor appears comparatively simpler, likely due to the harsh geographical environment and limited local resources of the Makran region.

Settlement Organization and Urban Planning

Archaeological evidence suggests that Sutkagan Dor exhibited a relatively organized settlement pattern. The site appears to have been divided into two principal sections: the **Citadel** and the

Lower Town. The citadel likely served administrative, defensive, or elite functions, whereas the lower settlement accommodated ordinary inhabitants, craftsmen, and commercial activities.

The spatial arrangement of structures indicates a degree of planned urban organization. Parallel walls and systematically arranged building foundations suggest the presence of internal pathways, residential spaces, and possibly designated activity zones within the settlement.

Given the arid environmental conditions and scarcity of water resources, the inhabitants of Sutkagan Dor likely depended upon the Dasht River and seasonal water channels for sustenance. Unlike the sophisticated drainage systems of larger Harappan cities, no advanced urban water management infrastructure has been discovered at the site. Instead, the inhabitants appear to have adopted practical and localized strategies suited to the environmental realities of the Makran coast.

Overall, the organization of Sutkagan Dor demonstrates that, while the

settlement remained culturally connected to the broader urban traditions of the Indus Civilization, it was also uniquely adapted to the environmental, commercial, and strategic requirements of a remote coastal frontier.

Material Culture and Archaeological Findings

The archaeological remains discovered at Sutkagan Dor provide important insights into the social, economic, and cultural life of its inhabitants. Excavations have yielded pottery, stone tools, metal objects, shell ornaments, beads, and various utilitarian artifacts, all of which reflect the broader material culture of the Indus Valley Civilization.

Pottery constitutes one of the most significant components of the site's material assemblage. Archaeologists recovered red ware ceramics, vessels decorated with black-painted geometric motifs, storage jars, bowls, and cooking pots. Decorative patterns, including parallel lines, wavy motifs, and zigzag designs, demonstrate the artistic

traditions and aesthetic sensibilities characteristic of Harappan culture.

Stone and metal tools also represent an important aspect of the settlement’s material culture. Excavations uncovered flint and chert blades, scrapers, and arrowheads, indicating activities related to hunting, defense, and domestic use. Copper implements, including needles and small tools, further suggest the presence of craftsmanship and technological skills among the inhabitants.

Personal ornaments recovered from the site include shell bangles, beads, onyx ornaments, and fragments of glass objects. These discoveries reflect not only aesthetic preferences but also evidence of commercial interaction and the utilization of marine resources. Such materials suggest that the settlement participated in broader exchange networks involving both local and imported goods.

Economy and Trade

The economy of Sutkagan Dor appears to have been multidimensional, relying

upon trade, maritime interaction, limited agriculture, and craft production. Due to its strategic geographical location, the settlement emerged as an important trading center along the Makran coast.

Archaeological evidence indicates that Sutkagan Dor formed an integral component of the Indus Valley Civilization’s trade network, facilitating maritime connections with **Mesopotamia**, the **Persian Gulf**, and southwestern Iran. Commodities such as semi-precious stones, shells, beads, timber, textiles, and crafted goods were likely exported through this settlement, while valuable raw materials and imported products entered the region through maritime exchange.

In addition to sea-borne commerce, overland trade routes connected Sutkagan Dor with inland Balochistan and the urban centers of the Indus Civilization. Trade routes passing through valleys and mountain corridors likely facilitated communication and economic exchange between this coastal outpost and the Harappan heartland.

The local economy may also have involved limited agricultural and pastoral activities, particularly in fertile zones near the Dasht River. Although the arid climate restricted large-scale farming, seasonal water resources would have enabled subsistence agriculture and livestock management.

Significance within the Indus Valley Civilization

Sutkagan Dor is of exceptional importance for understanding the geographical expansion, maritime trade, and cultural influence of the Indus Valley Civilization. The site demonstrates that the Harappan Civilization extended far beyond the Indus River plains, reaching the coastal regions of Balochistan and participating actively in long-distance exchange networks.

The settlement played a crucial role in the maritime trading system of the Indus Civilization, facilitating commercial interactions with distant civilizations, particularly Mesopotamia. This evidence suggests that Harappan communities possessed considerable expertise in maritime navigation,

regional commerce, and resource distribution.

Furthermore, the site’s strong fortifications and defensive architecture imply that security and strategic control were major priorities in this frontier region. Therefore, Sutkagan Dor functioned not only as a commercial center but also as a strategically important outpost on the western edge of the Harappan world.

Conservation and Modern Challenges

Today, Sutkagan Dor faces multiple preservation challenges. Its remote location, insufficient governmental monitoring, illegal excavations, environmental degradation, and coastal geographical transformations pose serious threats to the site’s long-term survival.

Like many archaeological sites in Balochistan, Sutkagan Dor is legally protected under Pakistan’s **Antiquities Act of 1975**. However, limited archaeological documentation, insufficient conservation measures, and

the absence of continuous field research remain major concerns.

Rapid infrastructural development in the Makran coastal region, particularly projects associated with the **China–Pakistan Economic Corridor (CPEC)**, has further intensified concerns regarding the preservation of archaeological heritage. Scholars emphasize that advanced geophysical surveys, non-invasive archaeological techniques, and international academic collaboration are essential for improving knowledge and ensuring the conservation of the site.

Conclusion

Sutkagan Dor is an exceptionally important archaeological site of the Indus Valley Civilization, representing the westernmost expansion, maritime connections, and cultural interactions of this ancient urban society. The site’s geographical position, defensive architecture, material culture, and commercial role collectively demonstrate that the Indus Civilization was highly organized, economically dynamic, and geographically expansive.

The importance of Sutkagan Dor extends beyond the study of the Indus Valley Civilization alone; it also contributes significantly to understanding the ancient history of Balochistan, the Makran coastal region, and broader patterns of interregional exchange in antiquity. Future scientific excavations and preservation initiatives may further illuminate the historical significance of this remarkable archaeological site.

References

1. de Cardi, B. (1970). *Prehistoric and Protohistoric Baluchistan*. London: University of London Press.

2. Dales, G. F. (1962). “Harappan Outposts on the Makran Coast.” *Antiquity, 36*(143), 86–92.

3. Kenoyer, J. M. (1998). *Ancient Cities of the Indus Valley Civilization*. Karachi: Oxford University Press.

4. Possehl, G. L. (2002). *The Indus Civilization: A Contemporary Perspective*. Walnut Creek, CA: AltaMira Press.

5. Stein, A. (1931). *An Archaeological Tour in Gedrosia*. *Memoirs of the Archaeological Survey of India*.

6. Wright, R. P. (2010). *The Ancient Indus: Urbanism, Economy, and Society*. Cambridge: Cambridge University Press.

Tharri Gajo

Introduction

Tharri Gajo is one of the significant archaeological sites of ancient Sindh, associated with the “Rural Culture Phase” that predates the urban civilization of the Indus Valley. Situated approximately ten miles west of the city of Thatta, the site holds particular archaeological significance due to its geographical location, defensive architecture, and connections with ancient trade routes. The material remains discovered at the site provide valuable insights into the early agrarian communities, economic activities, and social organization of prehistoric Sindh (Cousens, 1929).

Geographical Setting and Trade Significance

The geographical location of Tharri Gajo considerably enhances its historical and cultural significance. The site was strategically positioned along an ancient overland trade route extending from Satkagen Dor, Balakot, and Alamano, passing through Tharri Gajo and continuing towards Nahto and other settlements in Kutch. This route served as a vital commercial corridor connecting the western regions of the

Indus Valley with Kathiawar and Kutch, facilitating the exchange of goods and cultural interactions. Consequently, Tharri Gajo should be viewed not merely as a settlement but also as an important center of trade and regional connectivity (Possehl, 2002).

Trade routes of this nature played a foundational role in the development of early civilizations in Sindh, as they enabled the circulation of technical knowledge, raw materials, agricultural products, and cultural traditions among geographically distant communities (Kenoyer, 1998).

Defensive Architecture and Settlement Organization

One of the most remarkable features of Tharri Gajo is its fortified settlement structure. Similar to Kot Diji, Kohtras Buthi, and Garhi Bhari, Tharri Gajo was enclosed within a defensive fortification. The walls of the fort were double-layered and substantially thick, reflecting a sophisticated understanding of security and settlement protection among its inhabitants.

The arches of the fortification were skillfully constructed, while the width of the fort reportedly measured approximately 250 feet, indicating a degree of architectural planning and organized settlement design. Such defensive arrangements suggest that the rural communities of ancient Sindh were gradually transitioning toward more structured and proto-urban forms of habitation (Fairservis, 1975).

Archaeological Discoveries

The British archaeologist Henry Cousens identified significant archaeological remains at Tharri Gajo associated with the Neolithic period. The discoveries included tools, pottery, and other forms of material culture, indicating that the inhabitants were engaged in agricultural and artisanal activities (Cousens, 1929).

The pottery assemblages and tools recovered from the site closely resemble those discovered at Amri and other contemporaneous settlements. This similarity provides evidence of a shared cultural tradition and regional interaction among prehistoric communities. Such material parallels

further indicate the existence of organized systems of trade, technological exchange, and cultural interaction across different settlements in Sindh (Wheeler, 1968).

Historical and Civilizational Importance

The historical significance of Tharri Gajo lies in its contribution to understanding the early developmental stages of society in Sindh prior to the emergence of urban civilization. The site’s defensive architecture, trade connections, and material remains collectively demonstrate that organized habitation, economic specialization, and social coordination had already begun to emerge in prehistoric Sindh. These developments later formed the foundation of the great urban centers of the Indus Valley Civilization (Kenoyer, 1998).

In this regard, Tharri Gajo is recognized as an important archaeological site for examining the developmental trajectory of early rural communities and the formative phases of the Indus Civilization.

Conclusion

In conclusion, Tharri Gajo represents an important archaeological site of the ancient Rural Culture Phase in Sindh, distinguished by its strategic geographical location, trade connections, defensive structures, and material remains. The archaeological evidence recovered from the site contributes significantly to our understanding of the social and economic life of early communities in Sindh and provides important clues regarding the formative stages of the Indus Valley Civilization. Therefore, the study of Tharri Gajo occupies an important position in the archaeological and historical reconstruction of ancient Sindh.

Footnotes

1. The primary information regarding Tharri Gajo is derived from the archaeological surveys conducted by Henry Cousens, which documented several ancient sites in Sindh.

2. The site’s association with regional trade routes provides important evidence for understanding economic interaction within the Indus cultural sphere.

3. The resemblance between the artifacts of Tharri Gajo and those of Amri demonstrates cultural continuity and interaction among early settlements.

References

Cousens, H. (1929). *The antiquities of Sind: With historical outline*. Government of India Central Publication Branch.

Fairservis, W. A. (1975). *The roots of ancient India: The archaeology of early Indian civilization*. University of Chicago Press.

Kenoyer, J. M. (1998). *Ancient cities of the Indus Valley civilization*. Oxford University Press.

Mughal, M. R. (1997). *Ancient Cholistan: Archaeology and architecture*. Ferozsons.

Possehl, G. L. (2002). *The Indus civilization: A contemporary perspective*. AltaMira Press.

Wheeler, M. (1968). *The Indus civilization* (3rd ed.). Cambridge University Press.

Thir

Introduction

The settlement system of the Indus Valley Civilization (IVC) consisted not only of major urban centers but also of smaller settlements that played an essential role in agricultural production, local trade, craft activities, and regional interactions. Northern Sindh contains several such minor archaeological sites that contribute significantly to understanding the broader social and economic structure of the Indus Civilization. Thir is one such site, located near Rohri Taluka in Sukkur District, Sindh, and associated with the Indus Valley Civilization.

Although Thir covers a relatively small area, the archaeological remains recovered from the site—including pottery fragments, flint tools, ceramic vessels, and baked brick architecture—demonstrate its antiquity and cultural significance. These discoveries suggest that the settlement likely functioned as an active component of the regional settlement system of the Indus Civilization.

Geographical Location

The archaeological site of Thir is situated in northern Sindh near Rohri Taluka in Sukkur District. The site lies approximately three miles east of Mamri, adjacent to an irrigation channel that flows toward the Raini River. This geographical location indicates that the settlement was closely connected to a water system, which would have been essential for human habitation, agriculture, and daily life in antiquity.

Like many settlements of the Indus Civilization, Thir appears to have been strategically established near water resources, as proximity to rivers and channels was a fundamental factor in the development of ancient communities. It is possible that the connection with the Raini River played an important role in the agricultural and economic activities of this settlement.

Area and Surface Characteristics of the Site

Thir is a very small Indus Civilization site, covering an estimated area of approximately one acre. Despite its limited extent, the site remains archaeologically important, as small

settlements formed an integral part of the broader urban and rural settlement network of the Indus Civilization.

The surface of the mound is covered with potsherds, providing clear evidence of habitation and everyday activities. The presence of ceramic remains generally indicates domestic life, food preparation, water storage, grain preservation, and household functions.

Archaeological Discoveries

Among the archaeological remains recovered from Thir, sharp-edged flint tools hold particular significance. Flint tools were skillfully manufactured throughout the Indus Civilization and were widely used for hunting, cutting, craft production, and various daily tasks. Their presence at Thir indicates sustained human activity and technological expertise at the site.

In addition, fragments of ceramic vessels have also been recovered, which were likely used for daily domestic purposes, food storage, or household consumption. A detailed study of the pottery’s typology and stylistic

characteristics may further contribute to understanding the cultural affiliations and chronological placement of the settlement.

Excavations at the site also revealed the remains of a wall constructed of baked bricks. The use of fired bricks represents one of the defining architectural characteristics of the Indus Civilization, where standardized baked bricks played an important role in urban and domestic construction. The discovery of this wall strongly suggests the existence of permanent residential or functional structures within the settlement.

Importance in the Regional Settlement Pattern of the Indus Civilization

Although Thir was a relatively small settlement, its existence is important for understanding the wider settlement system of the Indus Civilization. The Indus cultural sphere extended beyond major cities such as Mohenjo-daro and Harappa and consisted of an organized network of smaller and medium-sized settlements.

Sites such as Thir may have functioned as supporting settlements engaged in agricultural production, the supply of raw materials, or local trade. Such communities may have contributed significantly to supplying food, tools, and other resources to larger urban centers.

Conclusion

Thir represents a small yet important archaeological site of the Indus Valley Civilization in northern Sindh. Despite its limited size, the site has yielded important archaeological evidence, including pottery fragments, flint tools, ceramic vessels, and a baked brick wall, all of which confirm its association with the Indus Civilization.

Further systematic excavations and modern scientific investigations may provide deeper insights into the smaller settlements, regional interactions, and local economy of the Indus Civilization. Such research would not only enhance our understanding of Thir itself but also contribute to reconstructing the broader civilizational framework of the Indus world.

References

1. Majumdar, N. G. (1934). *Explorations in Sindh*. Karachi: Government of India Press.

2. Wheeler, Mortimer. (1968). *The Indus Civilization* (3rd ed.). Cambridge: Cambridge University Press.

3. Possehl, Gregory L. (2002). *The Indus Civilization: A Contemporary Perspective*. Walnut Creek, California: AltaMira Press.

4. Kenoyer, Jonathan Mark. (1998). *Ancient Cities of the Indus Valley Civilization*. Karachi: Oxford University Press.

5. Mughal, M. Rafique. (1997). *Ancient Cholistan: Archaeology and Architecture*. Lahore: Ferozsons.

Tando Rahim

Introduction

Tando Rahim is one of the significant archaeological sites in Sindh, located in the Johi Taluka of Dadu District. The site lies approximately four miles north of Ghazi Shah. Archaeological remains discovered at the site, particularly pottery fragments, provide important insights into the material culture and artistic traditions of ancient communities. The structure, coloration, and decorative patterns of the pottery contribute to an understanding of the social and cultural characteristics of the period.

Geographical Location

Tando Rahim is situated in Johi Taluka of Dadu District, a historically important region in western Sindh near the Kirthar mountain range. Its location approximately four miles north of Ghazi Shah suggests the possibility of cultural and economic interactions with neighboring ancient settlements in the region.

The geographical characteristics of the area, including access to natural water resources and fertile lands, would likely have provided favorable conditions for ancient human habitation.

Archaeological Evidence and Ceramic Tradition

The material remains recovered from Tando Rahim are particularly notable for their pottery, which was manufactured using buff ware, a distinctive feature of ancient ceramic traditions.

The pottery is characterized by a light red or buff-colored base, while the painted decorations appear in black or chocolate-brown shades. This style of coloration and ornamentation reflects the aesthetic preferences and technical expertise of ancient potters in Sindh.

The use of decorative motifs and pigments also suggests that pottery production at Tando Rahim served not only practical domestic purposes but also embodied artistic expression and cultural identity.

Cultural Significance

The distinctive nature of the pottery recovered from Tando Rahim makes the site particularly valuable for the study of ancient material culture in Sindh. The buff ware ceramics, combined with black or chocolate-colored painted motifs, indicate the presence of a developed ceramic tradition.

Such material culture is useful for comparative archaeological studies with other ancient sites in Sindh and highlights the continuity and evolution of regional artistic traditions and cultural interactions over time.

Conclusion

Tando Rahim is an important archaeological site in Dadu District, distinguished by its unique ceramic tradition and material remains. The buff ware pottery, light red or buff-colored surfaces, and black or chocolate-colored painted decoration provide significant evidence regarding the artistic and cultural development of ancient Sindh. Further archaeological excavation and scientific investigation may yield a deeper understanding of the historical significance of this site.

References

1. Allchin, B., & Allchin, R. (1982). *The Rise of Civilization in India and Pakistan*. Cambridge University Press.

2. Kenoyer, J. M. (1998). *Ancient Cities of the Indus Valley Civilization*. Oxford University Press.

3. Majumdar, N. G. (1934). *Explorations in Sindh*. Government of India Press.

4. Lambrick, Hugh Trevor. (1964). *Sind: A General Introduction*. Sindhi Adabi Board, Jamshoro.

5. Mughal, M. R. (1997). *Ancient Cholistan: Archaeology and Architecture*. Ferozsons.

Taoong je Bathi

Introduction

Taoong je Bathi is an important archaeological site in Sindh that provides valuable evidence regarding the cultural transition and continuity between the rural and urban phases of the Indus Valley Civilization. The site is situated near Teong village, at the foothills of the Gaj Mountains and on the northeastern edge of the Dunbar Hills. Archaeological excavations conducted by archaeologist Hugh Trevor Lambrick

revealed pottery remains associated with both the Amri period (rural culture) and the Harappan period (urban civilization). These findings indicate that the site remained occupied during successive phases of cultural development.

Geographical Location

Taoong je Bathi is located on the northeastern side of the Dunbar Hills, near Teong village, at the foothills of the Gaj mountain range in present-day Dadu District, Sindh. The geographical setting of the site, situated close to hills and natural resources, suggests that it may have been selected for habitation due to ecological advantages, including access to water, raw materials, and defensible terrain.

The location of the site within a mountainous environment also reflects the adaptive strategies of early communities in western Sindh, where settlements often developed near seasonal streams and fertile valleys.

Archaeological Evidence and Material Culture

Excavations at Taoong je Bathi led by archaeologist Hugh Trevor Lambrick revealed pottery associated with two distinct cultural phases of the Indus Valley Civilization: the Amri and Harappan periods.

The Amri period is generally considered representative of the early rural or pre-urban cultural stage, characterized by village-based settlements, agricultural practices, and localized craft production. In contrast, the Harappan period represents the mature urban phase of the civilization, distinguished by advanced town planning, standardized material culture, and extensive trade networks.

The discovery of ceramics from both cultural traditions suggests a continuity of occupation at Taoong je Bathi, indicating that the settlement may have evolved from a rural community into one influenced by the expanding urban traditions of the Harappan Civilization.

Historical Significance

The significance of Taoong je Bathi lies in its ability to demonstrate cultural

continuity between the early Amri phase and the later Harappan urban tradition. Archaeological sites containing material remains from both periods are particularly important because they help scholars understand the transformation of village-based societies into urbanized communities.

Furthermore, the site contributes to the broader understanding of settlement patterns in the Kirthar and Gaj mountain regions, where communities maintained interactions with lowland urban centers while adapting to local ecological conditions.

Conclusion

Taoong je Bathi represents an important archaeological site in Sindh that offers evidence for the transition from the Amri rural culture to the Harappan urban civilization. The pottery remains discovered by Hugh Trevor Lambrick indicate prolonged habitation and cultural continuity across different historical phases. As a result, the site occupies an important place in the archaeological study of prehistoric Sindh

and the developmental history of the Indus Valley Civilization.

References

1. Allchin, B., & Allchin, R. (1982). *The Rise of Civilization in India and Pakistan*. Cambridge University Press.

2. Kenoyer, J. M. (1998). *Ancient Cities of the Indus Valley Civilization*. Oxford University Press.

3. Lambrick, Hugh Trevor. (1964). *Sind: A General Introduction*. Sindhi Adabi Board, Jamshoro.

4. Majumdar, N. G. (1934). *Explorations in Sindh*. Government of India Press.

5. Mughal, M. R. (1997). *Ancient Cholistan: Archaeology and Architecture*. Ferozsons.

Tharo Tikri

Introduction

Tharo Tikri is an important archaeological site located in Thatta District, Sindh, Pakistan. It is associated with the rural cultural phase of the Indus Civilization. The site is situated approximately 2 kilometers southwest of Gajo village on the Karachi–Thatta Road and southeast of the tomb of Sheikh Turabi. Due to its geographical location and cultural significance, Tharo Tikri occupies an important place in the study of the prehistoric and protohistoric periods of Sindh.

Geographical Context

Tharo Tikri lies in the lower Sindh region, close to the coastal belt that has supported human habitation since ancient times. The area's favorable geography, including cultivable land and proximity to ancient communication and trade routes, provided suitable conditions for settlement. Such an

environment encouraged the development of rural communities that later contributed to the broader cultural evolution of the Indus Civilization.

Archaeological Significance

Archaeologists have identified Tharo Tikri as a site belonging to the rural cultural phase of the Indus Civilization. During the early stages of the civilization, rural settlements were primarily based on agriculture, animal husbandry, and local craft production. These communities established the social, economic, and technological foundations upon which the major urban centers of the Indus Valley Civilization later emerged.

Surface remains at the site, including pottery sherds, traces of habitation, and other cultural materials, indicate that it was once occupied by a settled community. Although extensive excavations have not yet been conducted, the available archaeological evidence points to the site's antiquity and cultural importance.

Relationship with the Rural Culture of the Indus Civilization

Tharo Tikri is one of several archaeological sites that contribute to our understanding of the social and cultural developments that preceded the urban phase of the Indus Civilization. Rural settlements such as this reveal the existence of small agricultural communities distributed across different regions of Sindh. Over time, these communities evolved into increasingly organized and complex societies, eventually leading to the emergence of urban centers such as Mohenjo-daro. The study of such sites is therefore essential for reconstructing the early developmental stages of the Indus Civilization.

Historical Importance

The significance of Tharo Tikri extends beyond its antiquity. It also provides evidence for the long continuity of human occupation in southern Sindh. The site demonstrates that the Thatta region and its surrounding areas were centers of human activity thousands of

years ago. Consequently, Tharo Tikri represents an important source of information for understanding both the prehistoric period of Sindh and the broader process of cultural evolution within the Indus Valley Civilization.

Conclusion

Tharo Tikri is an important archaeological site in Thatta District associated with the rural cultural phase of the Indus Civilization. Its geographical location, cultural affiliation, and evidence of ancient habitation make it valuable for the study of the early history of Sindh. Future archaeological investigations and scientific excavations may reveal additional information about the site's chronology, settlement patterns, and role in the development of the Indus Civilization.

References

1. Lambrick, Hugh Trevor. (1964). *Sind: A General Introduction*. Jamshoro, Pakistan: Sindhi Adabi Board.

2. Lambrick, Hugh Trevor. (1975). *Sind Before the Muslim Conquest. Sindhi Adabi Board, Jamshoro.*

3. Majumdar, N. G. (1934). *Explorations in Sind*. Karachi: Government of Sindh.

4. Mughal, M. R. (1997). *Ancient Cholistan: Archaeology and Architecture*. Lahore: Ferozsons.

5. Wheeler, R. E. M. (1968). *The Indus Civilization* (3rd ed.). Cambridge, England: Cambridge University Press.

Thirhi Bahadur Shah

Introduction

Thirhi Bahadur Shah is an important archaeological site located

approximately 1.5 kilometers east of Jhat Pat Railway Station in the Nasirabad region of Balochistan, Pakistan. The site is associated with the urban phase of the Indus Valley Civilization. Surface investigations have revealed traces of mud-brick structures, indicating the presence of a permanent and organized ancient settlement. Thirhi Bahadur Shah is one of the many small and medium-sized settlements that formed part of the broader cultural and economic network linked with major urban centers such as Mohenjo-daro and Harappa.

Geographical Location

The site is situated near Jhat Pat Railway Station, within a region that historically served as an important corridor connecting Sindh, Balochistan, and Punjab. Its strategic location suggests that it may have played a role in facilitating communication, trade, and cultural interaction among different regions during the Indus Civilization period. Such settlements were often positioned along routes that connected larger urban centers with peripheral communities.

Archaeological Remains and Discoveries

Archaeological observations at the site have identified traces of structures constructed from mud bricks. The use of mud bricks, alongside baked bricks, was a characteristic feature of Indus Civilization architecture. These remains indicate the existence of planned habitation and suggest that the settlement may have contained residential or administrative buildings. Although no large-scale excavations have yet been conducted at Thirhi Bahadur Shah, the visible surface remains demonstrate its archaeological significance and antiquity.

Association with the Indus Civilization

The Indus Valley Civilization was one of the world's earliest urban civilizations, flourishing approximately between 2600 BCE and 1900 BCE. It is renowned for its sophisticated urban planning, standardized brick architecture, drainage systems, craft production, and extensive trade networks. Sites such as Thirhi Bahadur Shah formed part of this

extensive cultural landscape, linking major cities with smaller settlements that contributed to the economic and social organization of the civilization.

Historical Significance

The importance of Thirhi Bahadur Shah lies in its contribution to understanding the geographical extent and settlement patterns of the Indus Civilization. Archaeological sites located in the border regions of Sindh and Balochistan demonstrate that the civilization extended far beyond its major urban centers. Such settlements provide valuable evidence for studying ancient trade routes, agricultural practices, social organization, and cultural interactions. Continued research at the site may help clarify the role it played within the wider Indus cultural sphere.

Conclusion

Thirhi Bahadur Shah represents a significant archaeological site associated with the urban phase of the Indus Valley Civilization. The remains of mud-brick structures attest to the existence of an organized settlement and contribute to

our understanding of the civilization's regional expansion. Future archaeological surveys and scientific excavations have the potential to reveal further information regarding the site's chronology, function, and relationship with other Indus settlements. Consequently, the preservation and systematic study of Thirhi Bahadur Shah are essential for advancing knowledge of the ancient history of the Indus region.

References

1. Kenoyer, J. M. (1998). *Ancient Cities of the Indus Valley Civilization*. Oxford University Press.

2. Khan, A., & Lemmen, C. (2013). Bricks and urbanism in the Indus Valley rise and decline. *arXiv Preprint arXiv:1303.1426*.

3. Lambrick, H. T. (1975). *Sind: A General Introduction*. Jamshoro: Sindhi Adabi Board.

4. Marshall, J. (1931). *Mohenjo-daro and the Indus Civilization* (Vols. 1–3). London: Arthur Probsthain.

5. Possehl, G. L. (2002). *The Indus Civilization: A Contemporary Perspective*. Walnut Creek, CA: AltaMira Press.

6. Wheeler, R. E. M. (1968). *The Indus Civilization* (3rd ed.). Cambridge University Press.

Tigrana

Introduction

Tigrana is an important archaeological site associated with the **Indus Valley Civilization (IVC)**, located in the Bhiwani district of Haryana, India. It is considered one of the significant rural and semi-urban settlements within the

broader **Indus-Saraswati cultural sphere**, contributing substantially to the understanding of the development, expansion, and later transformation of Harappan civilization. Tigrana has attracted considerable archaeological interest due to its **multi-cultural and multi-period occupational sequence**, as evidence from the site demonstrates the presence of **Pre-Harappan**, **Early Harappan**, **Mature Harappan**, and **Late Harappan** phases.

The settlement is generally believed to date back to approximately **2400 BCE onward**, although some scholars suggest that its earliest cultural layers may extend to even earlier periods. Archaeological findings—including pottery assemblages, mud-brick architecture, seals, semi-precious stones, metal artifacts, and evidence of agricultural practices—indicate that Tigrana was a well-organized settlement where agriculture, animal husbandry, craft production, and trade formed integral components of the local socio-economic structure.

The archaeological importance of Tigrana is further enhanced by its

location near the **palaeo-channels of the ancient Saraswati River system**, which likely provided access to water resources, fertile agricultural land, and transportation routes essential for sustaining settlement activities. This strategic geographical position identifies Tigrana as one of the emerging regional centers within the wider Indus-Saraswati Civilization.

Geographical Location

Tigrana is a village and archaeological site situated in the **Bhiwani district of Haryana state, India**, approximately **8 kilometers north of Bhiwani city along the Bhiwani–Jind road**. The region experiences a **semi-arid climate** and was historically influenced by the ancient river systems connected to the **Saraswati basin**, creating favorable conditions for early human habitation.

Geographically, Tigrana lies at approximately **28°51′43″ North latitude and 76°08′13″ East longitude**. From an archaeological perspective, the site is positioned within the **Indo-Gangetic divide** and the

upper Saraswati basin, an area where numerous Harappan settlements flourished along ancient river channels.

In the present day, Tigrana functions as an agricultural village where farming remains the principal economic activity. According to the **2011 Census of India**, the village had a population of **10,712 inhabitants**, with a relatively satisfactory literacy rate. Despite its modern agrarian character, the archaeological deposits beneath the settlement preserve evidence of a cultural continuity spanning several millennia.

Historical Background

The historical significance of Tigrana is closely linked to the regional settlement system of the **Indus Valley Civilization**, particularly within the territory situated between the **Indus and Saraswati river systems**. Archaeological evidence suggests that the area remained inhabited from the **Chalcolithic (Copper-Stone Age)** through the various developmental stages of Harappan civilization.

The cultural sequence at Tigrana demonstrates a gradual process of socio-economic evolution, beginning with early agricultural communities and eventually developing into more organized Harappan settlements. During the initial phases, inhabitants likely lived in mud-built dwellings, relied primarily on agriculture and animal husbandry, and engaged in basic craft production. By the **Mature Harappan phase**, however, there was considerable advancement in pottery production, seal-making, ornament manufacturing, and regional trade interactions.

Tigrana also shares cultural affinities with neighboring archaeological sites such as Mitathal, Rakhigarhi, and Bhirrana. Collectively, these sites establish Haryana as an important cultural zone within the broader Indus-Saraswati Civilization. Archaeological materials recovered from the region indicate that its inhabitants maintained not only local interactions but also wider economic and cultural connections with distant regions.

Discovery and Excavation

The initial identification of the Tigrana archaeological site took place between **1968 and 1975**, when the distinguished archaeologist **Dr. Surajbhan** conducted regional surveys and identified the site as belonging to the **Pre-Siswal** and **Pre-Harappan cultural horizon**. These early investigations suggested that the area represented an important center of ancient human activity.

Later, in **1999**, **Dr. Surendra** carried out further investigations during his M.Phil. research, which provided additional evidence confirming Tigrana's developed Harappan character. Subsequently, in **2008**, **Dr. Narendra Parmar** conducted further research that highlighted the proto-historic significance of the site.

Systematic archaeological excavations officially commenced in **2016** under the supervision of **Professor Dr. Narendra Parmar**, Head of the Department of History and Archaeology at the Central University of Haryana. Excavations revealed multiple cultural layers, mud-brick structures, walls, floors, pottery assemblages, seals, metal objects,

ornaments, and semi-precious stones, all of which reflect a comparatively advanced socio-economic and cultural framework.

Additional excavation seasons were conducted in **2020, 2021, and 2024**, yielding further evidence regarding Harappan and post-Harappan continuity at the site. On **13 March 2025**, the Government of Haryana officially declared Tigrana—alongside the nearby site of Mitathal—a **protected archaeological monument and site**, ensuring legal safeguards against agricultural encroachment and other threats to this valuable cultural heritage.

Cultural Phases

The archaeological site of Tigrana is of considerable significance because of its **multi-phase cultural sequence**, representing evidence from the **Pre-Harappan**, **Early Harappan**, **Mature Harappan**, and **Late Harappan** periods. This cultural continuity is generally believed to span from approximately **4000 BCE to 1300 BCE**, providing crucial evidence for understanding the emergence,

development, and transformation of the **Indus-Saraswati Civilization**.

1. Pre-Harappan and Early Harappan Phase

The earliest cultural layers of Tigrana indicate the presence of **early agricultural communities** engaged in farming, animal husbandry, and craft production. During this stage, the site exhibits strong influences of the **Hakra** and **Sothi-Siswal cultural traditions**, which are considered important precursors to the Harappan Civilization.

Pottery from this period is characterized by **red ware decorated with black-painted geometric motifs**, wavy lines, and mud appliqué decorations. These ceramic traditions suggest a growing level of technological and artistic sophistication among the inhabitants.

The settlement pattern during this phase likely consisted of **small rural communities**, where inhabitants lived in mud-built houses and relied upon subsistence agriculture, storage facilities, and locally produced household goods. This phase represents

the formative stage of socio-economic development preceding the rise of the mature urban Harappan system.

2. Mature Harappan Phase

The **Mature Harappan period (2600–1900 BCE)** represents the most developed occupational stage at Tigrana. During this phase, settlement organization became increasingly sophisticated, accompanied by notable advancements in architecture, pottery production, craft specialization, and trade networks.

Ceramic assemblages belonging to this phase consist predominantly of **fine red-slipped pottery manufactured on the fast wheel**, often decorated with black-painted geometric motifs, straight and curved lines, circles, and symbolic patterns. These stylistic similarities establish strong cultural connections with other settlements of the Indus Valley Civilization.

Archaeological findings from this phase —including seals, ornaments, semi-precious stones, and metal objects— provide evidence of expanding trade

relations and increasing craft specialization. Such discoveries suggest that Tigrana functioned not merely as a rural settlement but as an economically integrated community linked to broader Harappan exchange systems.

3. Late Harappan Phase

Following **1900 BCE**, Tigrana displays evidence of the **Late Harappan phase**, during which earlier urban traditions gradually transformed. Pottery styles became comparatively simpler, while local ceramic traditions gained greater prominence.

This period is also marked by a decline in long-distance trade and a greater dependence on local economic activities. Nevertheless, the continuity of occupation at Tigrana demonstrates that the site did not experience abrupt abandonment after the decline of the urban Harappan system. Instead, human habitation persisted in modified cultural forms, reflecting adaptation to changing environmental and socio-economic conditions.

Architectural Features

Archaeological excavations at Tigrana have uncovered substantial evidence of **planned settlement organization and architectural development**. Excavators discovered **mud-brick walls, floors, and residential structures**, reflecting architectural traditions comparable to those found in other rural settlements of the Indus Civilization.

The evidence suggests that bricks were produced according to **standardized proportions** and arranged systematically in both horizontal and vertical alignments for construction purposes. The bricks measured approximately **9 × 18 × 36 centimeters**, corresponding closely to Harappan architectural norms.

Residential buildings appear to have consisted of **small mud-brick houses**, possibly topped with roofs constructed from wood, reeds, and thatch. Excavations also uncovered a **furnace or kiln**, suggesting local techniques for firing pottery and hardening construction materials.

Additionally, pits, refuse deposits, and storage-related features indicate that inhabitants maintained an organized domestic environment with designated spaces for waste disposal, storage, and everyday household activities.

Material Culture

The material culture of Tigrana is highly diverse and provides valuable insights into the **economic, social, and cultural life** of its inhabitants.

Seals and Script

Excavations at Tigrana yielded a **Harappan seal**, which constitutes important evidence for the administrative and commercial activities practiced at the site. The seal bears symbols associated with the **Indus Script**, one of the most enigmatic writing systems of the ancient world.

The script is generally believed to have been written from **right to left** and was likely associated with trade, identification, administrative control, and possibly ritual functions. The discovery of a seal at Tigrana suggests

that the settlement was integrated into wider Harappan systems of exchange and governance rather than functioning solely as an agricultural village.

Pottery

A substantial quantity of **handmade and wheel-made pottery** has been recovered from the site. These include bowls, storage jars, perforated vessels, dish-on-stand forms, and other utilitarian ceramics used in daily life.

Decorative motifs include **geometric designs, wavy lines, floral patterns, leaf motifs, and depictions of animals**, demonstrating a developed artistic tradition and symbolic expression. Many pottery fragments exhibit **black-on-red painted decoration**, closely linked to the **Sothi-Siswal and Harappan ceramic traditions**.

Metals, Ornaments, and Semi-Precious Stones

Excavations at Tigrana have also revealed artifacts made of **copper and bronze**, providing evidence for early

metallurgical knowledge and technological advancement. These materials were likely employed for the production of tools, domestic objects, and ornamental items.

A wide variety of ornaments—including bangles, beads, and necklaces made of **terracotta, faience, steatite, carnelian, agate, and other semi-precious stones**—have been discovered at the site. Particularly significant are the **carnelian beads**, which indicate trade connections with regions such as the **Gulf of Khambhat in Gujarat**, renowned for semi-precious stone production during the Harappan period.

Terracotta figurines, toys, and decorative objects further contribute to an understanding of the cultural and social life of the inhabitants, revealing aspects of aesthetic expression, symbolism, and daily practices.

Economy

The economy of Tigrana was primarily based on an **agro-pastoral system**, closely resembling the economic

foundations of other settlements associated with the **Indus-Saraswati Civilization**. Archaeological evidence, including archaeobotanical remains and faunal studies, indicates that the inhabitants depended upon a combination of **agriculture, animal husbandry, craft production, and trade** for subsistence and economic sustainability.

Despite being situated in a **semi-arid environment**, Tigrana benefited from its proximity to **ancient palaeo-channels**, which likely supplied water resources and fertile land suitable for cultivation. This geographical advantage played a critical role in sustaining settlement continuity and economic development.

Agriculture and Crops

Archaeobotanical investigations conducted at Tigrana reveal that the inhabitants cultivated several important crops, including **pearl millet (bajra)**, **barley**, **sorghum (jowar)**, and various **pulses**. These drought-resistant crops were particularly suitable for the semi-

arid environment and contributed significantly to food security.

Certain pottery fragments bearing motifs resembling **rice plants** suggest either the limited cultivation of rice or its procurement through regional trade networks. Furthermore, terracotta figurines of **bulls and bullock carts** indicate the probable use of animal power in agricultural activities, including plowing fields and transporting harvested produce.

Animal Husbandry

Animal husbandry constituted an essential component of Tigrana’s economic system. Excavated faunal remains demonstrate that the inhabitants domesticated **cattle, buffalo, sheep, and goats**, which were utilized for milk production, meat, labor, and other subsistence needs.

In addition to domesticated animals, remains of **wild species**, including deer and wild boar, suggest that hunting supplemented the local diet and contributed to resource diversification within the settlement economy.

Trade and Craftsmanship

Trade played a significant role in the economic structure of Tigrana. Archaeological discoveries of **carnelian**, **agate**, **lapis lazuli**, and other semi-precious stones indicate that the inhabitants maintained commercial interactions extending beyond their immediate locality.

The presence of **carnelian beads** strongly suggests trade relations with the **Gulf of Khambhat region in Gujarat**, an important center for semi-precious stone processing during the Harappan period. Likewise, copper and bronze artifacts imply exchange networks linking Tigrana with metallurgical zones in **Rajasthan**.

Craft specialization at the site included **pottery production, seal-making, bead manufacturing, bangle production, faience craftsmanship, and terracotta object production**. These activities demonstrate that Tigrana was not merely an agricultural settlement but also an active center of production and exchange within broader Harappan economic networks.

Social Life

The social organization of Tigrana appears to have been structured around **organized rural communities and family-based settlements**. Evidence from residential architecture, storage facilities, pottery assemblages, and domestic artifacts suggests a relatively stable and coordinated social environment.

The diversity and quality of ornaments indicate possible **social differentiation**, where access to finely crafted jewelry and semi-precious stones may have reflected differences in status or wealth. Although direct evidence regarding religious practices remains limited, seals, symbolic motifs, and decorative patterns may suggest the existence of ritual or ideological traditions within the settlement.

Archaeological Significance

Tigrana occupies an important position in the study of the **Indus-Saraswati Civilization**, primarily because it preserves evidence of **cultural continuity from the Early Harappan**

to the Late Harappan periods. Archaeological discoveries from the site demonstrate that Harappan influence extended beyond major urban centers to include smaller rural and semi-rural settlements characterized by organized social and economic systems.

The discovery of a **Harappan seal** contributes to the broader study of the undeciphered **Indus Script**, while pottery traditions, architectural remains, and evidence of trade networks provide valuable insights into the processes of regional adaptation, transformation, and continuity following the decline of urban Harappan civilization.

Nearby Related Sites

The archaeological importance of Tigrana becomes clearer when studied in relation to neighboring Harappan settlements, including:

- Mitathal — A major Harappan site located near Tigrana, exhibiting similar pottery traditions, architectural remains, and cultural phases.

- Rakhigarhi — One of the largest urban settlements of the Indus Valley Civilization.
- Bhirrana — A significant site providing evidence regarding the earliest developmental stages of Harappan culture.
- Kalibangan — A prominent Harappan center known for agricultural evidence and urban planning.

Conclusion

Tigrana represents a significant archaeological site of the **Indus-Saraswati Civilization**, providing valuable evidence concerning ancient settlement systems, agricultural practices, craft specialization, trade, and social organization. Its importance lies particularly in its **multi-phase cultural continuity**, which preserves evidence of habitation from early agricultural communities through the Late Harappan period.

The archaeological remains of Tigrana not only enhance our understanding of the expansion of Harappan civilization in Haryana but also illuminate the broader

network of economic and cultural interactions that connected settlements across the Indus-Saraswati region. As such, Tigrana serves as an important case study for examining the evolution, resilience, and transformation of ancient South Asian societies.

References

1. Parmar, N. (2021). *Archaeological investigations in the Saraswati basin: Tigrana and surrounding Harappan settlements*. Haryana: Central University of Haryana.
2. The Indus Civilization: A Contemporary Perspective (2002). Walnut Creek, CA: AltaMira Press.

3. Ancient Cities of the Indus Valley Civilization (1998). Karachi: Oxford University Press.
4. A History of Ancient and Early Medieval India (2008). New Delhi: Pearson Education.
5. The Ancient Indus: Urbanism, Economy, and Society (2010). Cambridge: Cambridge University Press.

Usman Ji Bathi

Introduction

Among the archaeological sites of Sindh, several locations hold great importance

for understanding prehistoric cultures and the early cultural development of the Indus region. **Usman Ji Bathi** is one such important archaeological site, where discovered artifacts and structural remains provide valuable information about ancient human settlement, technological skills, and economic activities. The evidence recovered through excavation and archaeological surveys suggests that this area once served as an important center of human habitation in ancient times.

Geographical Location

The ancient site of **Usman Ji Bathi** is located approximately **one kilometer south of Arab Jo Goth**, on the **eastern bank of the Baran Nai**, near **Wahi village**. This geographical location indicates that proximity to water sources was of major importance for ancient settlements. Seasonal streams and river channels were essential for drinking water, agriculture, livestock management, and transportation.

Its location near the Baran Nai further suggests that the inhabitants may have been engaged in agricultural and pastoral activities, while the natural environment provided the resources necessary for survival.

Excavation and Archaeological Discoveries

During excavation at the site, remains of **residential rooms were discovered approximately two feet below the surface**, providing evidence of an organized human settlement. Such structural remains offer important insights into ancient social organization, architectural techniques, and patterns of habitation.

More than **sixty artifacts** were recovered from the site, highlighting its cultural significance. Among these finds, **pottery decorated with two-colored painted designs** is particularly notable. The pottery vessels generally possess **straight necks**, which may reflect a distinctive ceramic tradition of the period.

Artifacts and Cultural Significance

During archaeological surveys, **N. G. Majumdar** also recovered **sharp stone tools**, which provide important evidence regarding the technological practices and daily activities of the site's inhabitants. Such tools were likely used for hunting, cutting, food preparation, and other domestic or economic purposes.

In addition, the discovery of a **marine shell** during excavation is of particular significance, as it suggests the possibility of trade relations or contact with coastal regions. The presence of marine shells at inland archaeological sites in Sindh often indicates the exchange of goods between coastal and interior communities.

Historical and Archaeological Importance

Usman Ji Bathi, with its structural remains, decorated pottery, stone tools, and marine shell artifacts, provides important information about the social and economic life of ancient Sindh. The site suggests that ancient communities not only utilized local natural resources

but also participated in craft production and regional exchange networks.

The site may represent one of the early settlements in Sindh where organized cultural and economic activities were gradually emerging, eventually contributing to the rise of more developed urban civilizations.

Conclusion

Usman Ji Bathi is an important archaeological site located along the Baran Nai that offers valuable evidence regarding ancient settlement patterns, architectural structures, pottery traditions, stone tools, and possible trade relations. The remains of residential rooms, painted pottery, and marine shell artifacts discovered during excavation suggest that the site was an important prehistoric settlement. Further archaeological research may help clarify its historical significance and contribute to a deeper understanding of early human occupation in Sindh.

References

1. Allchin, B., & Allchin, R. (1982). *The Rise of Civilization in India and Pakistan*. Cambridge University Press.

2. Jonathan Mark Kenoyer (1998). *Ancient Cities of the Indus Valley Civilization*. Oxford University Press.

3. Lambrick, Hugh Trevor. (1964). *Sind: A General Introduction*. Sindhi Adabi Board, Jamshoro.

4. Nani Gopal Majumdar (1934). *Explorations in Sind*. Government of India Press.

5. Gregory L. Possehl (2002). *The Indus Civilization: A Contemporary Perspective*. AltaMira Press.

Vejalka

Vejalka is an important village located in Ranpur Taluka of Botad District, Gujarat, India, which holds special significance in terms of archaeology. Near this village, in 2014, an ancient archaeological site was discovered, later associated with the Indus Valley Civilization. This site is particularly important because it helps in understanding the southern and rural nature of Indus Valley settlements.

Geographically, Vejalka lies in a region that, in ancient times, served as a major

route for trade and social connections. The site is situated about 50 kilometers from the famous archaeological city of Lothal, one of the key port centers of the Indus Valley Civilization. Its proximity to Lothal suggests that Vejalka may have played a role in supplying raw materials, handicrafts, or agricultural produce.

In Gujarat, around 190 Indus Valley sites have been discovered, most of them in Kutch and Saurashtra. Vejalka was one such rural center, economically and socially linked to urban hubs. According to archaeologists, villages like these were vital for supplying food, raw materials, and craft goods to cities.

The surrounding areas of Vejalka also hold archaeological importance. Neighboring villages such as Chandarva and Bhimnath contain Indus Valley mounds, reflecting the continuity of ancient human settlement in the region. The Chandarva site is largely destroyed, while Bhimnath remains relatively well-preserved.

At Vejalka, three major mounds known as Neshadho exist: Neshadho I (10,000

sq. m), Neshadho II (37,500 sq. m), and Neshadho III (22,500 sq. m). Their size and arrangement indicate a well-organized, multi-phase settlement that developed over time.

This site is crucial for studying rural centers of the Indus Valley Civilization, as it provides valuable insights into economic ties between urban and rural systems, local industries, and domestic architecture. Evidence from Vejalka suggests that it was a key example of daily life, craft production, and economic structure in ancient society.

Discovery, Excavation, Cultural Phases, and Architectural Features

Systematic excavation at Vejalka began in 2014 and continued for two years under the supervision of students and faculty from the Department of Archaeology and Ancient History, Maharaja Sayajirao University of Baroda. The main aim was to understand the nature of ancient settlement, lifestyle, and its links with the Indus Civilization.

Findings revealed that the site dates from around 2300 BCE to 1600 BCE,

belonging to the later or regional phases of the Indus Civilization. This period represents the gradual transformation after the peak of major urban centers, when rural hubs played a significant role in economic activities.

Excavations showed that Vejalka was a rural center supplying raw materials to nearby cities, especially Lothal. This highlights that the Indus economy was not limited to large cities but included a network of rural settlements responsible for production and distribution.

The three mounds—Neshadho I, II, and III—indicate phased expansion of settlement. Neshadho II, the largest, covers about 37,500 sq. m. Architectural remains include mud walls and traces of domestic structures, showing that houses were built with local materials, mainly mud. This construction style resembles other rural Indus sites where mud structures were common instead of baked bricks.

Material evidence also points to limited craft activity. Stone tools and beads suggest local processing of raw materials. Large quantities of

“Micaceous Red Ware” pottery strongly confirm the site’s Indus affiliation, as this ceramic type is a hallmark of the period.

Material Culture, Economy, Social Life, Importance, and Conclusion

Artifacts from Vejalka provide important knowledge about material culture. Excavations yielded pottery vessels, animal bones, stone tools, beads, and mud architecture, reflecting daily life, economic activities, and craft skills. The pottery indicates storage of food, water, and domestic use, while stone blades and beads show small-scale industry and ornamentation.

Economically, Vejalka was a rural hub supplying raw materials to urban centers like Lothal. Animal bones suggest livestock was significant, while agriculture was likely practiced. Its location shows integration into a wider economic system of production, trade, and resource distribution.

Socially, mud houses and organized settlement patterns reveal a structured residential system. Beads and

ornaments suggest cultural traditions linked to adornment, trade, and possibly social status.

The importance of Vejalka lies in its role as a rural Indus site, offering insights into the broader socio-economic framework of the civilization. While most studies focus on major cities like Lothal, Harappa, and Mohenjo-daro, sites like Vejalka help us understand the rural foundations that sustained the civilization.

Conclusion

Vejalka is a significant rural archaeological site of the Indus Valley Civilization, inhabited between 2300 BCE and 1600 BCE. The artifacts, domestic structures, beads, stone tools, and pottery show that it was not only a residential center but also engaged in economic and craft activities. Thus, Vejalka stands as an important example for understanding the interconnections between urban and rural systems of the Indus Civilization.

References

1. Ghosh, A. (Ed.). (1989). *An Encyclopaedia of Indian Archaeology*. New Delhi: Munshiram Manoharlal.
2. Possehl, G. L. (2002). *The Indus Civilization: A Contemporary Perspective*. Walnut Creek, CA: AltaMira Press.
3. Singh, U. (2008). *A History of Ancient and Early Medieval India: From the Stone Age to the 12th Century*. New Delhi: Pearson Education.
4. Archaeological Survey reports and excavation records related to Vejalka, Gujarat (2014–2016).